Lexicon

BD-30 Blu-ray Disc Player
User Guide

Table of Contents

Media File Playback

Setup Menu Options

References

Appendix

1

Important Information

CAUTION

RISK OF ELECTRIC SHOCK.
DO NOT OPEN.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instruction in the literature accompanying the appliance.
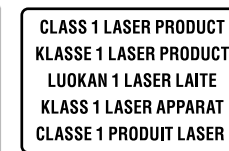
WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

THE APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

CAUTION:

DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE.

THIS PRODUCT UTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

CAUTION	CLASS 3R VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID DIRECT EYE EXPOSURE.
VORSICHT	KLASSE 3R SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG WENN GEÖFFNET. UNMITTELBAREN AUGENKONTAKT VERMEIDEN.
ADVARSEL	SYNLIG OG USYNLIG LASERSTRÅLING AF KLASSE 3R VED ÅBNING. UNDGÅ AT SE DIREKTE PÅ STRÅLEN.
ADVARSEL	SYNLIG OG USYNLIG LASERSTRÅLING I KLASSE 3R NÅR DEKSEL ÅPNES. UNNGÅ DIREKTE EKSPONERING AV ØYNENE.
VARNING	KLASS 3R SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. UNDVIK ATT DIREKT EXPONERA ÖGONEN FÖR STRÅLNINGEN.
VARO!	AVATTUNA LUOKAN 3R NÄKYVÄÄ JA NÄKYMÄTÖNTÄ LASERSÄTEILYÄ. VÄLTÄ KATSEEN SUORAA ALTISTAMISTA.
警告	打开时有3R类可见和不可见激光辐射,避免眼睛受到直射的照射

CLASS 1 LASER PRODUCT
KLASSE 1 LASER PRODUCT
LUOKAN 1 LASER LAITE
KLASS 1 LASER APPARAT
CLASSE 1 PRODUIT LASER

This label is located on the laser protective housing inside the product.

Important Safety Instructions

1) Read these instructions.
2) Keep these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this apparatus near water.
6) Clean only with dry cloth.
7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched, particularly at plug, receptacle, and the point where it exits from the apparatus.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13) Unplug this apparatus during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15) Warning: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture, and objects filled with liquids, such as vases, should not be placed on this apparatus.
16) To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC receptacle.
17) The mains plug of the power supply cord shall remain readily accessible.

Precautions

- Before connecting the AC power cord to the appliance, make sure the voltage designation of the appliance corresponds to the local electrical supply. If you are unsure of your power supply, contact your local power company. The acceptable power input range is AC ~ 100V-240V, 50/60Hz.
- The player is still receiving power from the AC power source as long as it is connected to the wall outlet, even if the player itself has been turned off.
- Unplug the power cord if you are not going to use the product for an extended period of time. Hold the power plug when unplugging. Do not pull on the cord.
- The main plug is used as the mechanism for cutting off power; therefore, make sure it is easy to unplug.
- To ensure proper ventilation around this product, do not place this product on a sofa, bed or rug. When installing this product on a wall or bookshelf, you need to provide appropriate space.
- High temperature will lead to abnormal operation of this unit. Do not expose this unit or batteries to direct sunlight or near other heating objects.
- When moving the player from a cold location to a warm one, or vice versa, moisture may condense on the laser pickup unit inside the player. Should this occur, the player may not operate properly. In such a case please turn the unit on for 1-2 hours (without a disc) to facilitate moisture evaporation.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
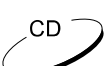
Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Trademarks

- "Blu-ray Disc", "BONUSVIEW" and "BD-Live" are trademarks of Blu-ray Disc Association.
- Java and all Java-based trademarks and logos are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.
- DVD Logo is a trademark of DVD Format/Logo Licensing Corp., registered in the U.S., Japan and other countries.
- Super Audio CD, SACD and the SACD logo are joint trademarks of Sony Corporation and Philips Electronics N.V. Direct Stream Digital (DSD) is a trademark of Sony Corporation.
- "AVCHD" and the "AVCHD" logo are trademarks of Panasonic Corporation and Sony Corporation.
- Designed for Windows Media, Microsoft, HDCD, and the HDCD logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.
- VRS™, Video Reference Series™, Precision Deinterlacing™, Precision Video Scaling™, Progressive Cadence Detection™ and AutoCUE-C™ are trademarks of Anchor Bay Technologies Inc. All products bearing the DVDO®, iScan™ and VRS™ trademarks are based upon technologies, architectures, and product designs originally created and developed by the Anchor Bay Team.
- Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.
- "DTS" is a registered trademark of DTS, Inc. and "DTSHD Master Audio | Essential" is a trademark of DTS, Inc.
- HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.
- All other trademarks are the properties of their respective owners.

Compatible Disc Types

Type/Logo	Features	Manual Icon
BD-Video	High Definition (HD) movie and music discs BD-ROM and BD-RE/BD-R discs in BDMV and BDAV mode, including 8cm discs (single layer) and DL discs. BONUS*VIEW*™ – Discs supporting BONUSVIEW (BD-ROM version 2 Profile 1 version 1.1/Final Standard Profile) that allows Virtual packages or Picture-in-Picture functions to be used. BD*LIVE*™ – Discs supporting BD-Live (BD-ROM version 2 Profile 2) that provides interactive features when the player is connected to the Internet.	BD
DVD-Video	High quality movie and music discs. Commercially released DVD discs, DVD+RW/DVD+R/DVD-RW/DVD-R using Version 1.1 of the DVD Video Recording Format, finalized.	DVD
Super Audio CD	SACD: High resolution audio-only disc with stereo and/or multi-channel audio. Hybrid disc with both high resolution and CD-compatible layers.	SACD
CD	Compact Discs (CD) that contain audio and music	CD
AVCHD	High-definition digital video camera format using efficient data compression coding technology.	

Discs that cannot be played

- BDs with cartridge
- DVD-RAMs
- HD DVDs
- Data portion of CD-Extras
- BD-Video/DVD-Video with a different region code
- DVD-Audio (The DVD-Video portion of a DVD-Audio disc can be played.)
- Some DualDiscs: A DualDisc is a two-sided disc with DVD on one side and digital audio on the other side. The digital audio side does not meet the technical specifications of the Compact Disc Digital Audio (CD-DA) format so playback is not guaranteed.
- Music discs encoded with copyright protection technologies: among such discs, some do not conform to the CD standard and may not be usable on this player.

Disc care and handling

- To keep the disc clean from scratches or fingerprints, handle the disc by its edge. Do not touch the recording surface.
- Blu-ray Discs record data in very high density and the record layer is very close to the disc surface. For this reason, Blu-ray Discs are more sensitive to dust and fingerprints than DVD. Should you encounter playback problems and see dirty spots on the disc surface, clean the disc with a cleaning cloth. Wipe the disc from the center out along the radial direction. Do not wipe the disc in a circular motion.
- Do not use record cleaning sprays or solvents such as benzene, thinner and anti-static spray.
- Do not attach labels or stickers to discs as this may cause the disc to warp, become imbalanced or too thick, resulting in playback problems.
- Avoid exposing the discs to direct sunlight or heat sources.
- Do not use the following discs:
  – Discs with exposed adhesive from removed stickers or labels. The disc may get stuck inside the player.
  – Warped or cracked discs.
  – Irregularly shaped discs, such as heart or business card shapes.

Notes about BD-ROM compatibility

Since the Blu-ray Disc specifications are new and evolving, some discs may not play properly depending on the disc type, version and encoding. It is possible that a Blu-ray disc manufactured after the player was manufactured uses certain new features of the Blu-ray Disc specifications. To ensure the best possible viewing experience, the player may need a firmware or software update from time to time. Please visit Lexicon's web site www.Lexicon.com to check if updates are available.

Copyright Protection

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

Region management information

This player is designed and manufactured to respond to the region management information. If the region number of a BD-Video or DVD disc does not correspond to the region number of this player, this player cannot play the disc.

BD-Video: This player plays BD-Video with marks containing the region code A.

DVD-Video: This player plays DVD-Video with marks containing the region code 1 and ALL.

THX Certified Blu-ray Disc Player

THX Certified Blu-ray disc players are engineered to recreate superior sound and images that closely match the filmmaker's mastering environment. During the THX certification process, THX engineers conduct in-depth analysis of image quality and signal processing to ensure Blu-ray disc players present accurate color, contrast, and black/white levels without softening the picture or producing digital artifacts. And THX tests the source signal and multi-channel soundtrack to guarantee pristine quality and fidelity.

Whether you are watching your favorite Hollywood blockbuster or a re-mastered classic, the THX Certified Lexicon BD-30 lets you experience every sound and visual with the power and emotion of the filmmaker's studio.

For more information about THX certification, visit www.thx.com.

2

Installation

Front Panel Controls

1. POWER Button
2. IR Remote Sensor
3. Disc Tray
4. Display Window
5. OPEN/CLOSE Button
6. Playback Control and Navigation Buttons
7. USB Port

Front Panel Display Window
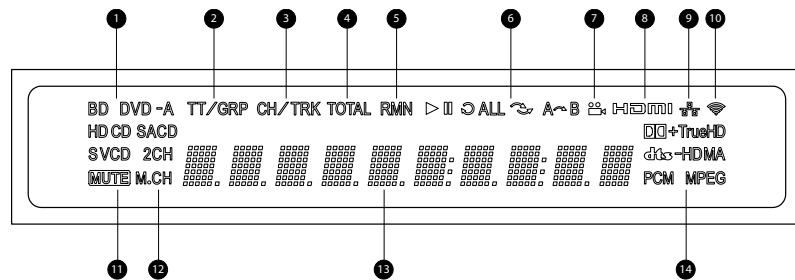
1. Disc Type Indication – Indicates the currently playing disc type
2. Title/Group – When illuminated, the displayed time applies to a title or group
3. Track/Chapter – When illuminated, the displayed time applies to a track or chapter
4. Total – When illuminated, the displayed time is the total play time
5. Remaining – When illuminated, the displayed time is the remaining play time
6. Playback Status – Indicates playback status such as Play, Pause, Repeat, Repeat All, Random/Shuffle, and A-B Repeat
7. Angle Icon – Indicates that the scene contains additional camera angle(s)

8. HDMI – Indicates that the HDMI output is active

9. Network – Indicates that a network cable is attached

10. Reserved – Not in use

11. Mute Icon – Indicates that the audio is muted

12. Audio Channel Indication – Indicates whether the audio is 2ch stereo or multi-channel surround

13. Main Display – Text messages and numeric display

14. Audio Type Indication – Indicates the type of audio tracks Playing

Rear Panel Connectors
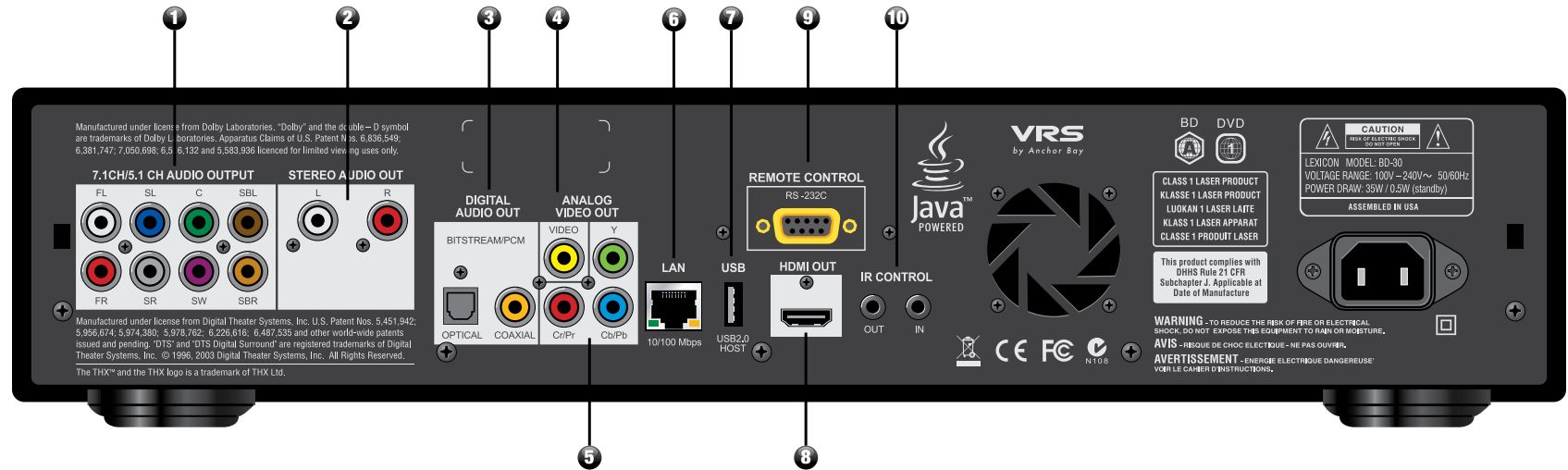
1. 7.1CH/5.1CH Audio Output

2. Stereo Audio Output

3. Coaxial and Optical Digital Audio Output

4. Composite Video Output

5. Component Video Output

6. Ethernet LAN Port

7. USB 2.0 Port

8. HDMI Output

9. Remote Control Port

10. IR IN and OUT Ports

In addition to the above connectors, the AC power inlet is also located on the rear panel. The inlet is the IEC60-320 C18 type. Only the included AC power cord or an approved power cord with an IEC60-320 C17 type plug should be used.

Remote Control

Remote Control Buttons
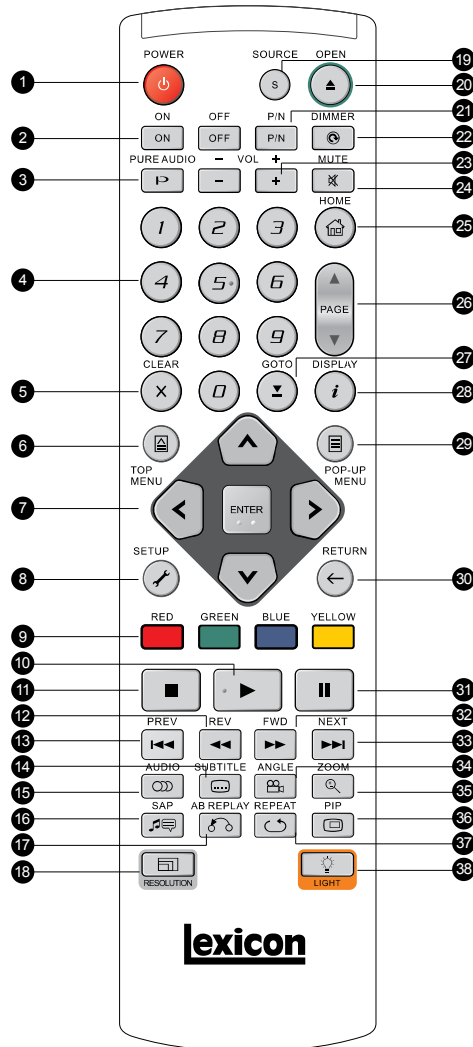
1. **POWER:** Toggle power STANDBY and ON

2. **ON/OFF:** Discrete on/off power buttons

3. **PURE AUDIO:** Turn off/on video

4. **NUMBER** Buttons:
    Enter numeric values

5. **CLEAR:** Clear numeric input

6. **TOP MENU:** Show BD top menu or DVD title menu

7. **ARROW** and **ENTER** Buttons: Navigate menu selection

8. **SETUP:** Enter the player Setup Menu

9. **COLOR** Buttons: Function varies by content

10. **PLAY:** Start playback

11. **STOP:** Stop playback

12. **REV:** Fast reverse play

13. **PREV:** Skip to previous

14. **SUBTITLE:** Change subtitle language

15. **AUDIO:** Change audio language or channel

16. **SAP:** Turn on/off Secondary Audio Program

17. **A-B REPLAY:** Repeat play the selected section

18. **RESOLUTION:** Switch output resolution

19. **SOURCE:** Go to Home Menu to select media source

20. **OPEN:** Open/close the disc tray

21. **P/N:** Switch output TV system: NTSC, PAL or MULTI

22. **DIMMER:** Dim front panel display

23. **VOLUME +/-:** Increase/Decrease volume

24. **MUTE:** Mute audio

25. **HOME:** Go to Home Menu to select media source

26. **PAGE UP/DOWN:** Show previous/next page

27. **GOTO:** Play from a specified location

28. **DISPLAY:** Show/hide On-Screen Display

29. **POP-UP MENU:** Show BD pop-up menu or DVD menu

30. **RETURN:** Return to the previous menu or mode

31. **PAUSE:** Pause playback

32. **FWD:** Fast forward play

33. **NEXT:** Skip to next

34. **ANGLE:** Change camera angle

35. **ZOOM:** Zoom in/out and adjust aspect ratio

36. **PIP:** Show/hide Picture-in-Picture

37. **REPEAT:** Repeat play

38. **LIGHT:** Activate back light for the remote control

Note:
When a button is pressed but its function is invalid or unavailable at the moment, the TV screen displays a circle with a diagonal line:
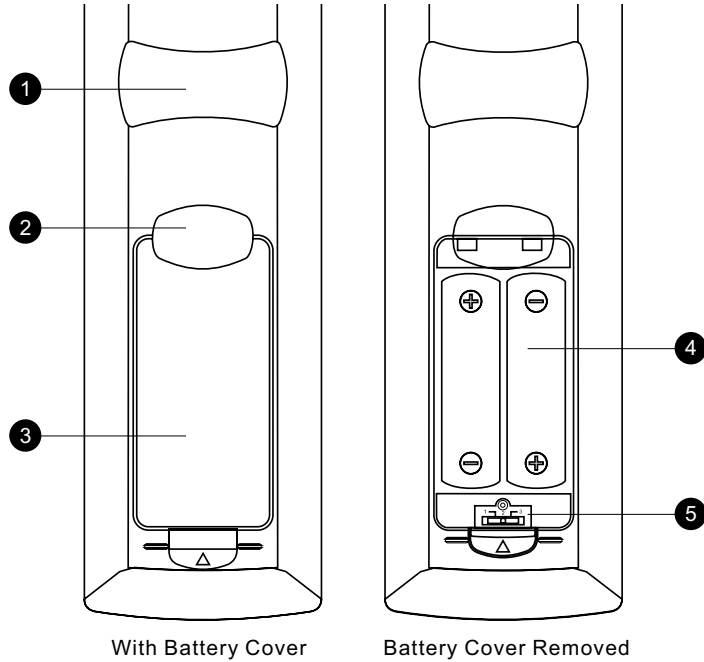
With Battery Cover   Battery Cover Removed

Back Side

1. **Index Finger Notch 1:** When your index finger is placed at this notch while holding the remote control, your thumb is within easy reach to the navigation buttons (ARROW, ENTER, TOP MENU and POPUP MENU).

2. **Index Finger Notch 2:** When your index finger is placed at this notch while holding the remote control, your thumb is within easy reach to the playback control buttons (STOP, PLAY, PAUSE, PREV, NEXT, REV, FWD).

3. **Battery Cover:** Remove to replace batteries or set remote code.

4. **Batteries:** Use (2) size AA or LR6 batteries.

5. **Remote Code Switch:** Adjust the position of the switch to set the remote control to use the indicated remote code.

Battery Installation
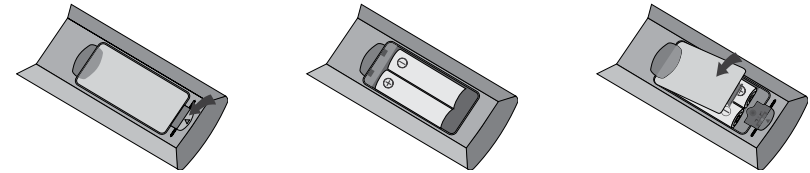
1. Remove the battery compartment cover
2. Insert batteries
3. Replace the battery compartment cover

Using the Remote Control

When using the remote control, the front window of the remote control should be pointed to the infrared sensor on the front panel within an angle of ±30° and a range of about 26 ft.

30°   30°

Within about 26ft
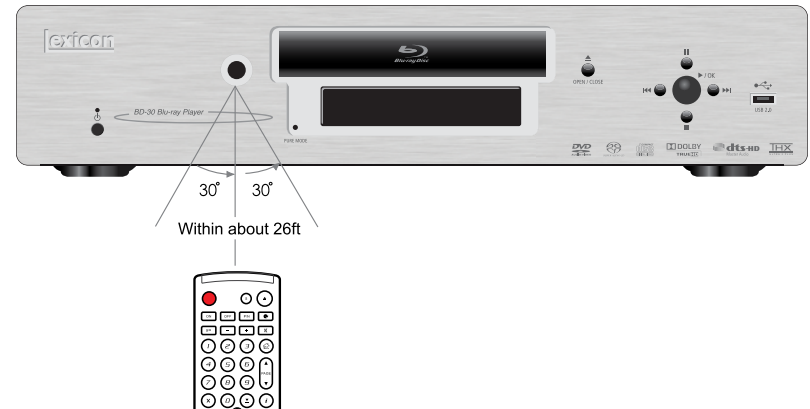
Setting the Remote Code

The remote control supports one of three remote codes. The default is "Code 1". If you have other Lexicon products placed close to the BD-30, they may inadvertently respond to the BD-30 remote control. In this case you can select a different remote code to avoid conflicts.

To select a new remote code, open the battery compartment cover of the remote control, and then use a ballpoint pen to flip the switch to one of the positions marked as "1", "2", or "3". Close the battery compartment cover. Make sure that the BD-30 player is turned on and the disc tray is ejected. Aim the remote control at the player. Press and hold the ENTER button for 5 seconds. The player will start using the new remote code.

Battery Compartment

Remote Code Switch
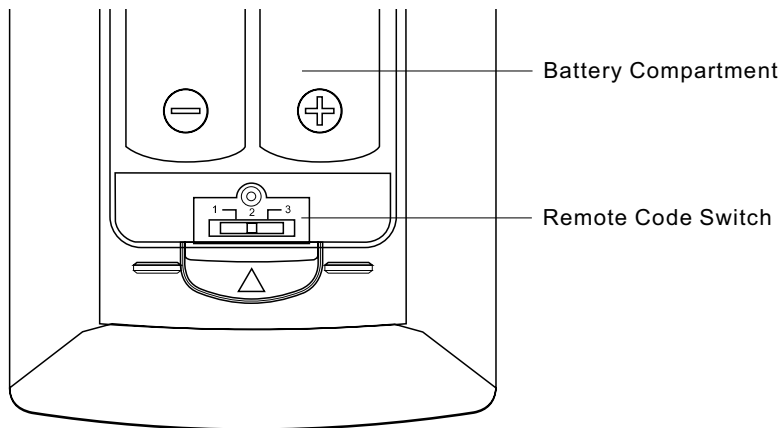
Cautions

*   *Never drop the remote control or expose it to moisture.*
*   *Never expose the infrared remote sensor on the front panel to direct sunlight or other strong light sources.*
*   *Remote may not operate consistently when batteries become low. Replace them if operation deteriorates.*
*   *If the remote control will not be used for a long time, please remove the batteries.*
*   *Use the batteries correctly to avoid possible leakage and corrosion. Do not leave the batteries exposed to direct sunlight or high-temperature environment for a long period of time. Do not heat or expose to flame. Do not mix old and new batteries. Do not use batteries of different types at the same time. Do not attempt to recharge the batteries.*
*   *In case battery leakage occurs, do not touch the liquid with bare hands. Wipe out any liquid inside the battery compartment, and insert new batteries.*

Connecting to a Display

HDMI Connection
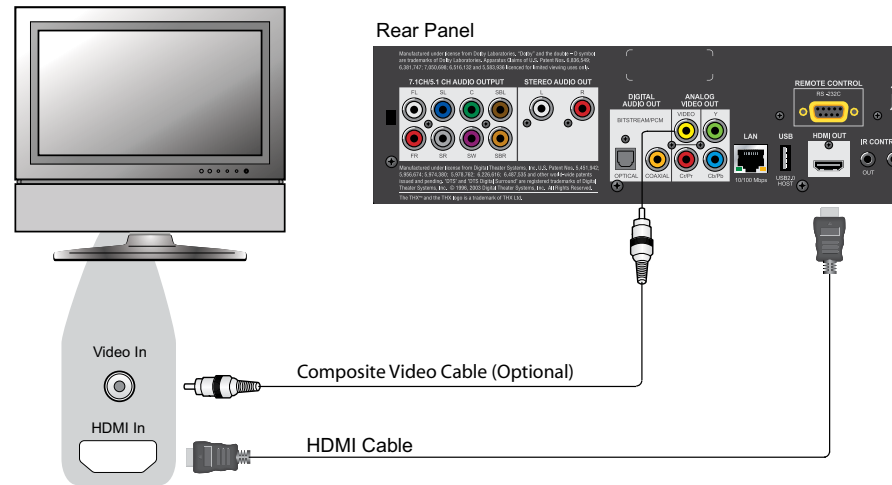
Method 1 – HDMI Connection Directly to TV

- If your TV has an HDMI (High-Definition Multimedia Interface) input, you can use the included HDMI cable to connect the player to the TV. This connection method delivers both video and audio in a pure digital format via a single cable. The HDMI video output of the player allows for the highest possible video quality and resolution.

- You may connect the composite video cable to the TV for troubleshooting purposes, just in case there is a problem with HDMI. However, it is not recommended to use the composite video as the primary method of video delivery to the TV, because it only produces a standard definition video signal and forfeits the advantage of high definition video.

DVI Connection
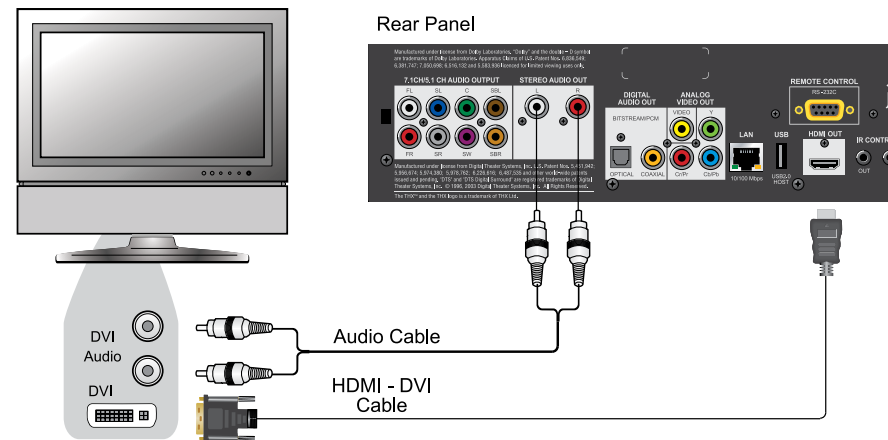
Method 2 – DVI Connection to TV

- If your TV has a DVI input that supports HDCP*, you can purchase an HDMI-DVI adapter cable to connect the player to the TV. This connection method delivers digital video to the TV without any signal degradation. The HDMI video output of the Lexicon Blu-ray Disc Player presents the highest possible video quality and resolution.

- Please use the Red/White audio cables to connect the STEREO AUDIO OUT terminals of the player to the TV. Make sure the audio cables are connected to the same input terminal group on the TV as the DVI input. Usually the input terminals are marked as "DVI Audio" or "PC Audio". On some TVs you may need to use an RCA-3.5mm Mini-Jack adapter cable to connect the audio.

- You may connect the composite video cable to the TV for trouble-shooting purpose, just in case there is a problem with DVI. However, it is not recommended to use the composite video as the primary method of video delivery to the TV, because it only produces a standard definition video signal and forfeits the advantage of high definition video.

Note

HDCP stands for High-bandwidth Digital Content Protection. The HDMI output of the Lexicon Blu-ray Disc Player uses HDCP to encrypt the digital audio and video content. The TV needs to support HDCP so it can decrypt the content and properly display it.

Component Video Connection
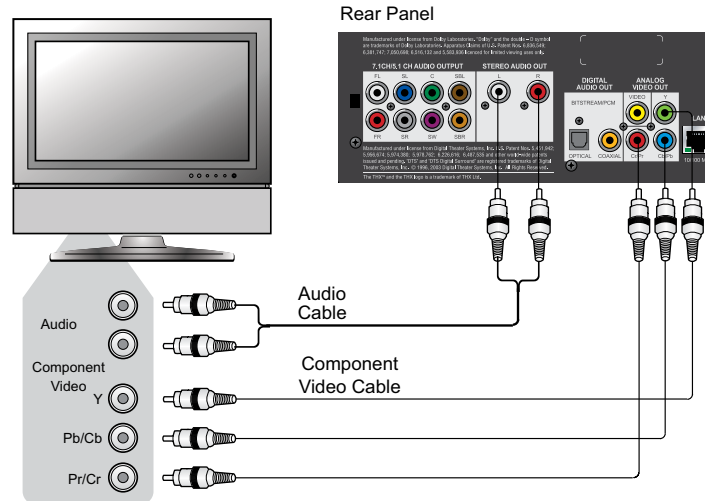
Method 3 – Component Video Connection to TV

- If your TV has no digital video input but has component video inputs, please use a set of component video cables to connect the component video output of the player to the TV. The connectors are color coded, so please make sure the cable connections match on both ends. The component video connection will produce a very clear picture with high color accuracy.

- Please use the Red/White audio cables to connect the STEREO AUDIO OUT terminals of the player to the TV. Make sure the audio cables are connected to the same input terminal group on the TV as the chosen component video input.

- When the "**Primary Output**" Setup Menu item in the "**Video Setup**" section is set to "**HDMI**" (see page 53 for details), the component video connection will not output video when playing a Blu-ray Disc with 1080p 24Hz content, or will only output video with a low resolution (480i/576i) when playing a DVD. This is not a malfunction. You must set "**Primary Output**" to "**Component**" in order to properly use the component video connection.

- When playing a Blu-ray Disc, video resolution over the component output can be up to 1080i. 1080p content will be interlaced into 1080i signal for the component output.

- When the "Primary Output" is set to "Component," the output resolution "Auto" is not supported.

- Video up-conversion over the component output is only available for unencrypted discs such as home video and consumer-created contents. Most commercially pressed DVD discs are CSSencrypted and will be limited to 480i/480p resolution. This restriction applies to the component output only. The HDMI output is protected with HDCP and has no such restriction.

- You may connect the composite video cable to the TV for trouble-shooting purpose, just in case there is a problem with component video. However, it is not recommended to use the composite video as the primary method of video delivery to the TV, because it only produces a standard definition video signal and forfeits the advantage of high definition video.

Connecting to an Audio System

Connecting to a Receiver/Amplifier with HDMI Input/Output
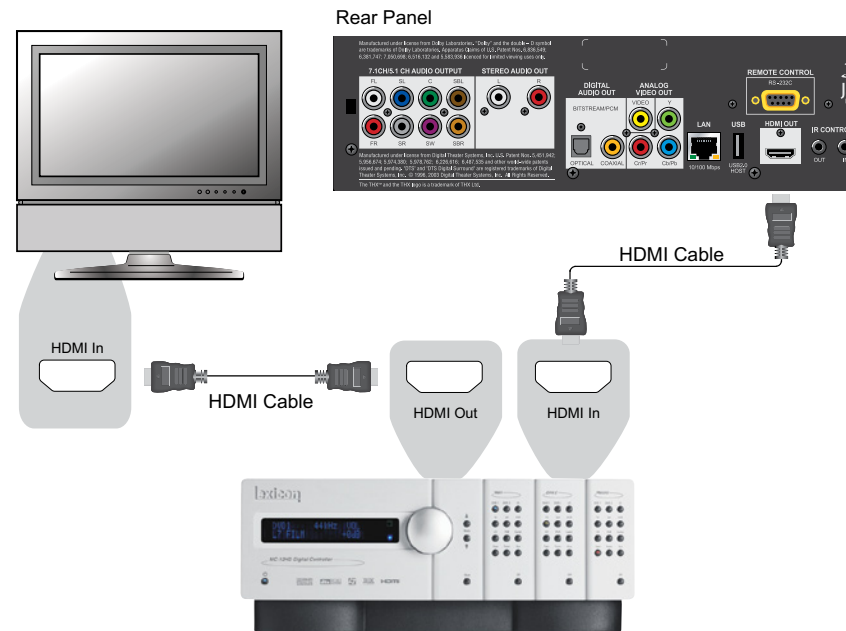
Method 4 – HDMI Connection to Receiver/Processor and TV

- HDMI can transmit both audio and video signals over a single cable. If you have an HDMI capable receiver that can support HDMI audio, you can simply run an HDMI cable from the player to your receiver and enable HDMI audio on the receiver (see your receiver's owners' manual for more information). The receiver usually has an HDMI output that you can connect to your TV to pass the video signal.

Note

HDMI is a wonderful thing. A single cable can transport both audio AND video from your player to your display. Be aware, however, that HDMI is an evolving standard, and there could be compatibility issues. A receiver that supports audio input over HDMI is required. Some receivers offer HDMI ports solely for video switching. If your receiver does not have audio input capability, please read the following sections regarding other connection methods.

In order to play multi-channel audio for all formats, the receiver must support HDMI v1.1 or later. For Blu-ray Disc, a receiver that supports HDMI v1.3 with decoding capability for Dolby TrueHD and DTS-HD Master Audio is preferred. Please check the specifications of your receiver to ensure that it meets the requirements.

Connecting to a Receiver/Amplifier with 7.1ch/5.1ch Audio Input

Method 5 – 7.1ch Analog Audio Connection

- Please use 8 RCA-style audio interconnect cables to connect the FL (Front Left), FR (Front Right), SL (Surround Left), SR (Surround Right), C (Center), SW (SubWoofer), SBL (Surround Back Left) and SBR (Surround Back Right) analog output terminals of the Lexicon Blu-ray Disc Player to the corresponding multi-channel analog audio input jacks of your A/V receiver or amplifier.

- If the A/V receiver or amplifier only has 5.1ch audio input, the SBL (Surround Back Left) and SBR (Surround Back Right) terminals do not need to be connected.

Rear Panel

Audio Interconnect Cables

Receiver/Processor with 7.1ch Audio Input
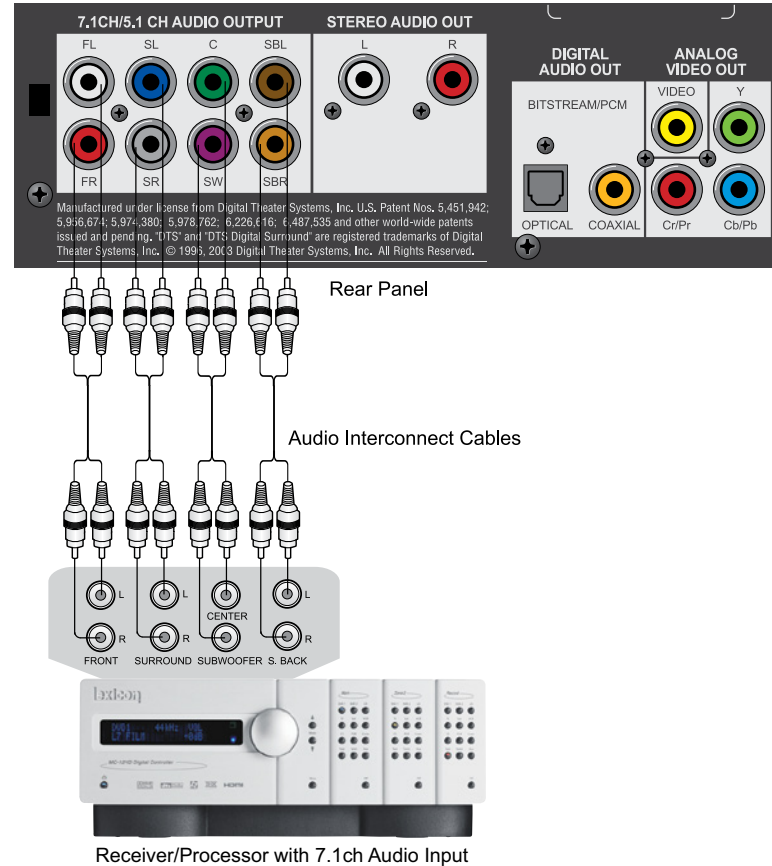
Connecting to a Receiver/Amplifier with Dolby Digital or DTS Decoder
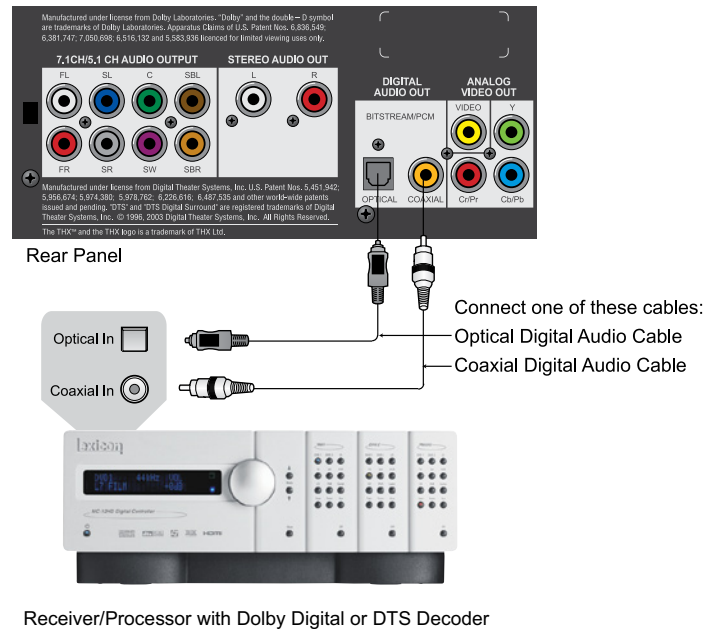
Method 6 – Digital Audio Connection

- Please use either a 75-Ohm coaxial digital audio cable with RCA-style connectors or an S/PDIF optical digital audio cable to connect one of the digital audio outputs to the corresponding input terminal on your A/V receiver.

NOTE
- *Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.*

- *"DTS" is a registered trademark of DTS, Inc. and "DTS-HD Master Audio | Essential" is a trademark of DTS, Inc.*

- *Due to bandwidth limitations, high resolution audio formats such as Dolby Digital Plus, Dolby TrueHD, DTS-HD High Resolution and DTS-HD Master Audio cannot be sent through the coaxial or optical digital audio output. A reduced resolution version of the same audio track will be output instead. To listen to high resolution audio formats in their best quality, please use the HDMI connection if you have a receiver that handles HDMI audio (see page 16) or use the multi-channel analog outputs if you do not (see page 17).*

- *Due to copyright restrictions, SACD audio cannot be sent through the coaxial or optical digital audio output. To listen to SACD, please use the HDMI or analog audio connections.*

Connecting to a Stereo Audio System

Rear Panel

Stereo Audio System
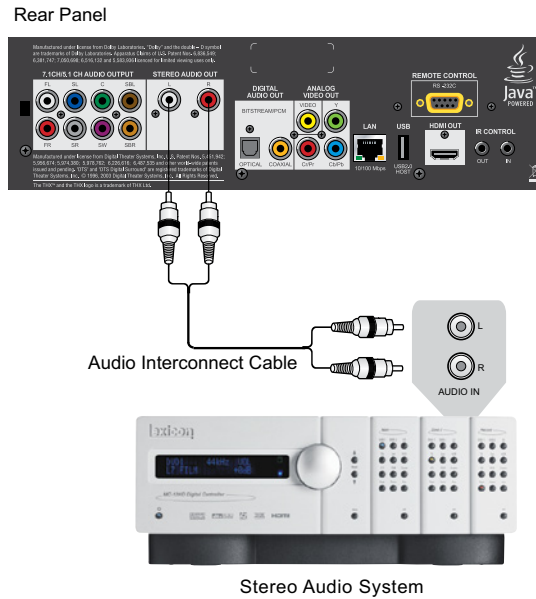
Method 7 – Stereo Analog Audio Connection

- If your audio system only offers stereo audio inputs, or if you would like to connect a dedicated stereo system in addition to the surround system, you can connect it to the STEREO AUDIO OUT terminals of the player.

NOTE
- *The STEREO AUDIO OUT terminals will always provide a down-mixed stereo signal from multi-channel sources. The "Down Mix" and other speaker settings in the Audio Processing Setup Menu (see page 63) do not affect the STEREO AUDIO OUT.*

Connecting to the Internet

The Lexicon BD-30 Blu-Ray Disc Player supports the BD-Live feature offered on some Blu-ray Disc titles. BD-Live offers extra downloadable content and additional online interactive programs. The available BD-Live contents vary by discs and studios, and may include additional subtitles, commentaries, movie trailers, games, and/or online chat.

Connecting the player to the Internet will also allow the player to obtain firmware updates via the Internet. (See pages 5 and 63 for more information regarding firmware updates.)

In order to utilize the BD-Live feature or update firmware via the Internet, the player needs to be connected to a broadband Internet connection. You must have access to a working broadband Internet service connection. It is not necessary to connect to the Internet if you do not intend to use the BD-Live and online firmware updating functionality.
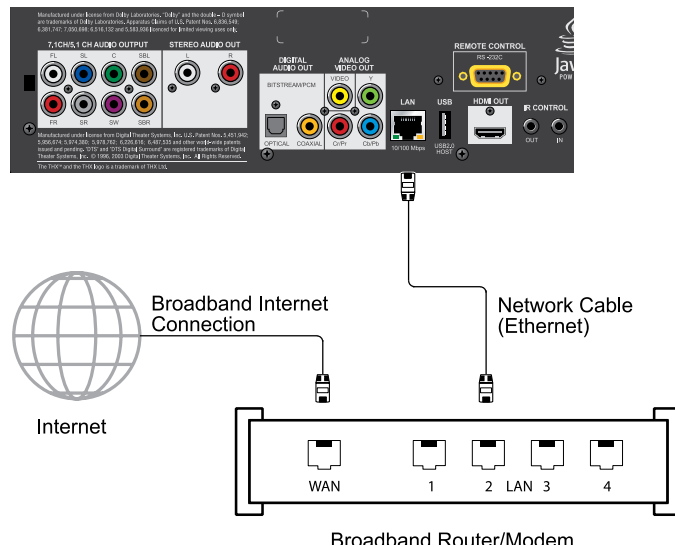
- Plug one end of a network cable (Category 5/5E straight Ethernet cable) into the LAN port on the back of the Lexicon Blu-ray Disc Player.

- Plug the other end of the network cable into a LAN port on the broadband router or modem.

- After physically connecting the player to a broadband Internet connection, some network configuration may be required. Please refer to the Network Setup section on page 70 of the manual for details.

- If you would like to connect the player to a broadband Internet connection via a wireless LAN router, please use an Ethernet/wireless LAN media converter (also called a wireless bridge or a gaming adapter). Refer to the operating instructions supplied with the media converter for details on how to configure it.

- Refer to the operating instructions supplied with the broadband router or modem, or contact the Internet service provider for questions related to setting up the router or modem.

Note
- *Only connect the LAN port of the player to an Ethernet port that supports 10BASE-T or 100BASE-TX. Connecting to any other ports or jacks, such as a phone jack, can damage the player.*

Rear Panel

Broadband Internet Connection

Network Cable (Ethernet)

Internet

WAN   1   2 LAN 3   4

Broadband Router/Modem

Custom Installation

External IR (Infrared Remote) Installation

The Lexicon BD-30 Blu-Ray Disc Player features IR IN and IR OUT ports on its back panel. If the player is to be installed in an equipment cabinet where direct line-of-sight is not available for remote control, your custom home theater installer can purchase an External IR Remote Sensor and plug it into the IR IN port. Place the sensor head at a location where there is direct line-of-sight to ensure reliable operation.

If you have another Lexicon device that features an IR IN port, the IR OUT port on the BD-30 can pass through remote control signal to the next Lexicon device.
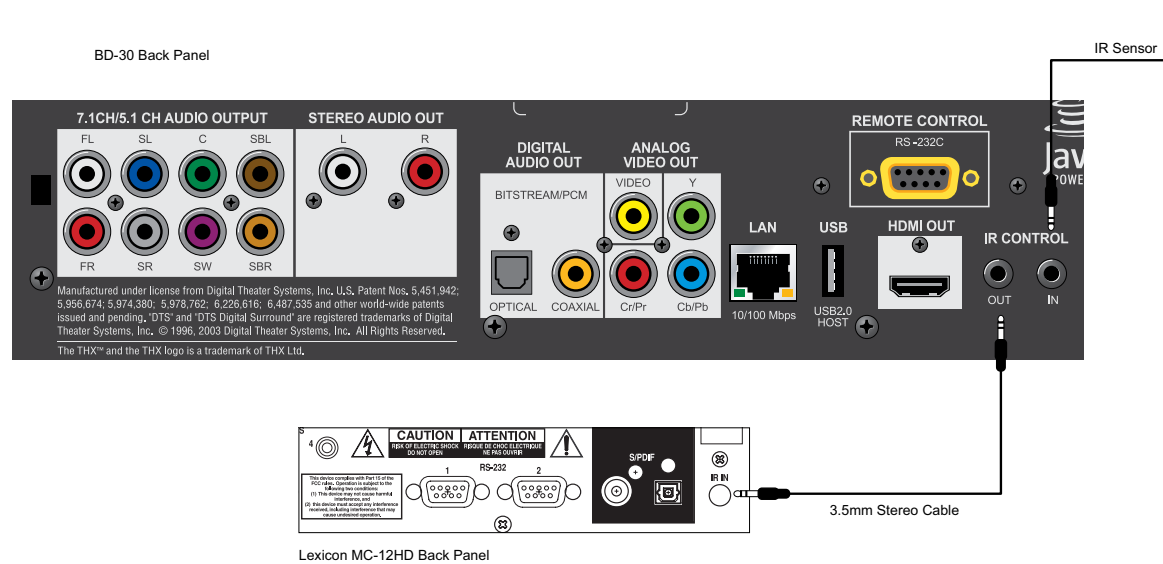
Note

- *Lexicon cannot guarantee that the IR IN and IR OUT ports will be compatible with all devices.*

- *Connecting the IR IN or IR OUT port to an incompatible device may result in damage to the connected device or the player.*

- *Please contact Lexicon customer support if you plan to integrate the player into an IR distribution system. Customer support can provide recommendations on how to properly connect the control signals.*
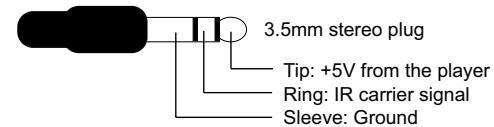
Setting Up the Player – Easy Setup Wizard

Access the Easy Setup Wizard

When the player is turned on for the first time, an Easy Setup Wizard screen will appear. It is a series of guided instructions designed to configure the basic settings for the player.

To start the Easy Setup Wizard, please follow these steps:

1) Turn on the TV.
2) Turn on the player.
3) Switch the input selection on your TV so that the TV displays the signal from the player. You should see the first step of the Easy Setup Wizard.

If the Easy Setup Wizard has previously been completed or cancelled, it will no longer initiate when you turn on the player. Instead, you will see the background screen with the Lexicon and Blu-ray Disc logos. To access Easy Setup Wizard, please press the **SETUP** button on the remote control, select **Device Setup**, then **Reset Factory Default**. Select "**OK**" to confirm loading the factory default settings. Once the factory default settings are loaded, the Easy Setup Wizard will appear.
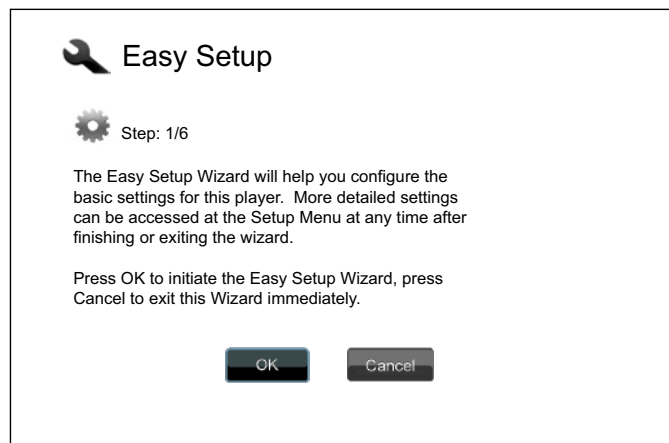
The first step of the Easy Setup Wizard gives you the opportunity to skip the entire wizard. If you are familiar with setting up audio/ video equipment and would like to customize the player settings using its Setup Menu, you may use the **LEFT/RIGHT ARROW** buttons to select the "**Cancel**" option, then press the **ENTER** key to exit the Easy Setup Wizard. Otherwise, to continue with the Easy Setup Wizard, select the "**OK**" option and press the **ENTER** key.

Choose the Primary Video Output
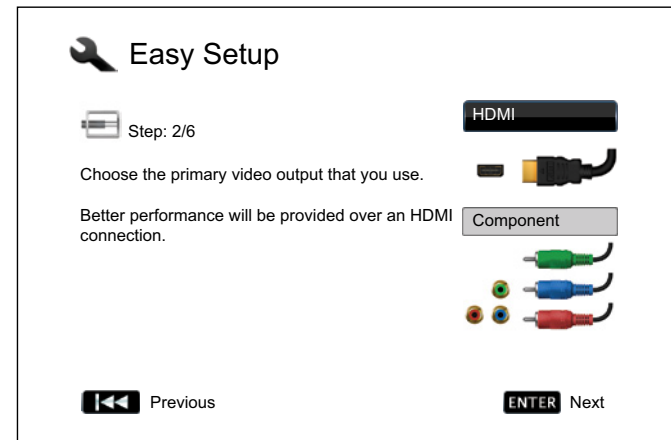
The player can output video through its HDMI and component output terminals. (Composite video output is also available but not recommended.) By setting the "**Primary Video Output**" option, the player can optimize video output of the selected terminal. The choices are "**HDMI**" and "**Component**". If you connect the player to the TV using an HDMI cable (Method 1 on page 13, Method 2 on page 14, or Method 4 on page 16), please select "**HDMI**". If you connect the player to the TV using component video cables (Method 3 on page 15), please select "**Component**". Please note: the best performance will be provided over the HDMI connection.

To make your selection, use the **UP/DOWN ARROW** buttons to highlight the choice, and then press the **ENTER** button to go to the next step.

Select the Best Output Resolution

One of the major advantages of the Lexicon Blu-Ray Disc Player is its ability to play high-definition Blu-Ray video and also up-convert standard definition video stored on DVD discs to high definition. The sophisticated video processor inside the player ensures that the video will have the best possible color, detail and motion. The player offers several standard and high definition video output resolutions. To get the best visual result, it is important to select an output resolution that best matches your TV or display device.

The rule of thumb when selecting an output resolution is to match the "native resolution" of your TV or display device as closely as possible. The "native resolution" is the resolution of the actual display component in the TV, such as the Plasma panel, LCD panel, or DLP™ chip. The TV may accept input signals with lower or higher resolutions than its native resolution. In such cases the electronics in the TV will up-scale or downscale the video to fit its display component. Unfortunately many TVs on the market only do an average job scaling the video. On the other hand, if you set the Lexicon Blu-ray Disc Player to output a resolution that matches or is very close to the native resolution of the TV, you are more likely to get a great picture.

For the latest generation of 1080p, "Full HD" or "True HD" displays, the best output resolution will naturally be 1080p. (A few early model 1080p displays do not accept 1080p signal. For these displays the best output resolution to use is 1080i.) For all other digital televisions this will likely be 720p. For CRT tube or rear projection televisions this will likely be 1080i. For EDTV displays (very rare if they have HDMI or DVI) this will be 480p. These are general recommendations that work for most users, but there can be exceptions. Advanced users may want to try all supported resolutions and choose the one that provides the best visual result.

The Lexicon Blu-ray Disc Player supports a special "Source Direct" output resolution on its HDMI output. This resolution is recommended for use with external video processors or high-end TVs. In "Source Direct" mode, the player works as a "transport". It decodes video from the discs and then sends the raw video signal in its native resolution and format, without extra processing, to the external video processor or TV. The actual output resolution varies by content:

Content	Source Direct Output Resolution
NTSC DVD	480i
PAL DVD	576i
Most Blu-ray Movies (film-source)	1080p 23.976Hz or 1080p 24Hz
Most Blu-ray TV shows or Concerts (video-source)	1080i
SACD	1080i

Depending on your selection of **"Primary Video Output"**, the available output resolution selections will differ. For the HDMI output, the following output resolutions are available: **Auto, 1080p, 1080i, 720p, 480p/576p, 480i/576i,** and **Source Direct**. If "**Auto**" is selected, the player will determine its output resolution based on the best signal resolution that the TV can display.

Easy Setup

Step: 3/6

Choose the output resolution which best matches your TV.

Change will be applied immediately. You will have 15 seconds to either save the new setting or rollback to the previous output resolution.

Auto
1080p
1080i
720p
480p/576p
480i/576i
Source Direct

⏮ Previous   ENTER Next
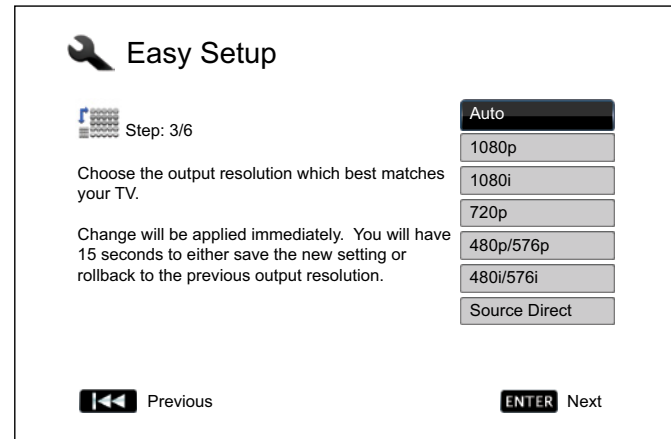
For the component output, the following output resolutions are available: 1080i, 720p, 480p/576p and 480i/576i. Please refer to the specification of your TV to find the best resolution to use.
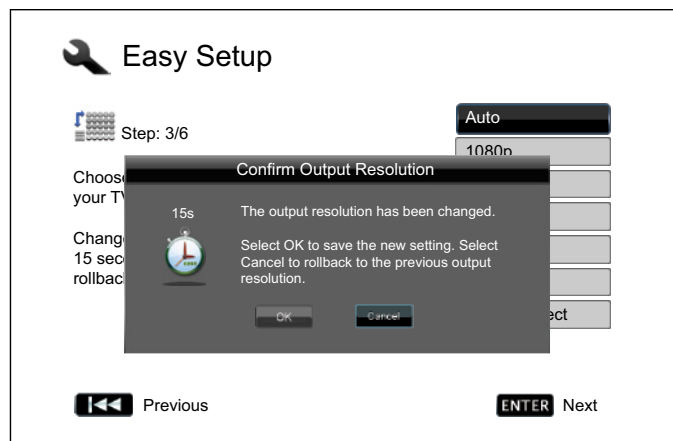
Press the **UP/DOWN ARROW** buttons to select the desired output resolution, then press the **ENTER** button. The player will apply the selected output resolution and ask you to confirm the selection. If your TV supports the selected resolution, you will see a dialog box with a countdown clock. Use the **LEFT ARROW** button to highlight the "**OK**" option and press the **ENTER** button to save the resolution setting. If your TV does not support the selected resolution, you may see a black screen or an error message. In this case please wait for 15 seconds and the Easy Setup screen will reappear. Select a different resolution that your TV can support.

Note
* *In case you are not able to get a picture using the HDMI or component output, please connect the player to the TV using the composite video output, and then use the Setup Menu to adjust the player settings.*

* *Video up-conversion over the component output is only available for unencrypted discs such as home video and consumer-created contents. Most commercially pressed DVD discs are CSS-encrypted and will be limited to 480i/480p resolution. This restriction applies to the component output only. The HDMI output is protected with HDCP and has no such restriction.*

Determine the Display Aspect Ratio
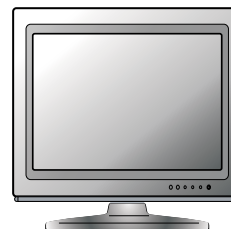
Standard Definition, or 4:3 TV
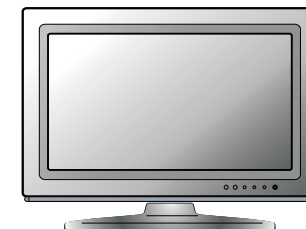
Wide Screen, or 16:9 TV

The aspect ratio is the proportional ratio of a TV screen's width and height. Older television sets generally have a 4:3 aspect ratio – the width is 4/3 (or 1.33) times the height. Newer wide screen television sets have a 16:9 aspect ratio – the width is 16/9 (or 1.78) times the height. For best performance, the video output of your player needs to match the screen aspect ratio of your TV. Since almost all Blu-ray Discs and many DVD discs are released in the wide screen format, it is highly recommended that you use a wide screen TV with the player.

The Aspect Ratio selections are **4:3 Letterbox**, **4:3 Pan & Scan**, **16:9 Wide**, and **16:9 Wide**/**Auto**. Depending on your selection and the video format recorded on the discs, image appearance on the TV screen can be one of the following:

Original Content	TV Screen Appearance			
	4:3		16:9	
	Letterbox	Pan & Scan	Wide	Wide/Auto
4:3				
16:9				

If you have a 4:3 or standard definition screen, select one of these options:

- **4:3 Letterbox** – Choose when the display is 4:3. Widescreen image is displayed in "letterbox" format with black borders on top and bottom (preferred).

- **4:3 Pan & Scan** – Choose when the display is 4:3. Both sides of a widescreen image are clipped (you lose about 30% of the picture).

If you have a widescreen (16:9) display, select one of these options:

- **16:9 Wide** – 16:9 (widescreen) sources will be displayed in their native aspect ratio, and 4:3 sources will be horizontally stretched.

- **16:9 Wide/Auto** – 16:9 (widescreen) as well as 4:3 sources will be displayed in their native aspect ratio. Please note that in this mode 4:3 sources will be displayed with black borders on both left and right sides to maintain the correct 4:3 aspect ratio.

Press the **UP/DOWN ARROW** buttons to select the proper aspect ratio for your TV, then press the **ENTER** button.

Easy Setup

Step: 4/6

Choose the desired Aspect Ratio for your TV.

| 4:3 Letterbox |
| 4:3 Pan & Scan |
| 16:9 Wide |
| 16:9 Wide/Auto |

- 4:3 Letterbox: For 4:3 TV. Wide screen content will be displayed in a letterbox.
- 4:3 Pan & Scan: For 4:3 TV. Wide screen content may be cropped on the sides.
- 16:9 Wide: For 16:9 TV.
- 16:9 Wide/Auto: For 16:9 TV. 4:3 content will be displayed with side borders.

Previous   **ENTER** Next
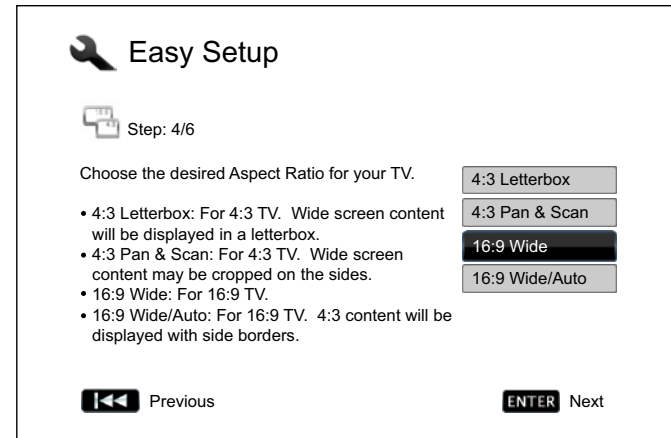
Select the Audio Setting

The Blu-ray Disc format brings not only high resolution video, but also high bit rate audio such as Dolby Digital Plus, Dolby TrueHD, DTS-HD High Resolution and DTS-HD Master Audio. Blu-ray Discs may also include additional audio features such as menu click sound and Secondary Audio Program (SAP – audio associated with the secondary video in Picture-in-Picture mode). Depending on the user preferences and other audio/video equipment connected to the player, the audio settings need to be adjusted to achieve the best result. The Easy Setup Wizard offers two basic selections to get you started.

Easy Setup

Step: 5/6

Select the audio setting.

Compatible

Advanced

• Compatible: For televisions and receivers with HDMI 1.1/1.2 or Optical/Coaxial connections.
• Advanced: For HDMI 1.3 receivers only. Secondary audio program is turned off by default.

Audio settings can be further customized in the setup menu.

⏮ Previous   ENTER Next
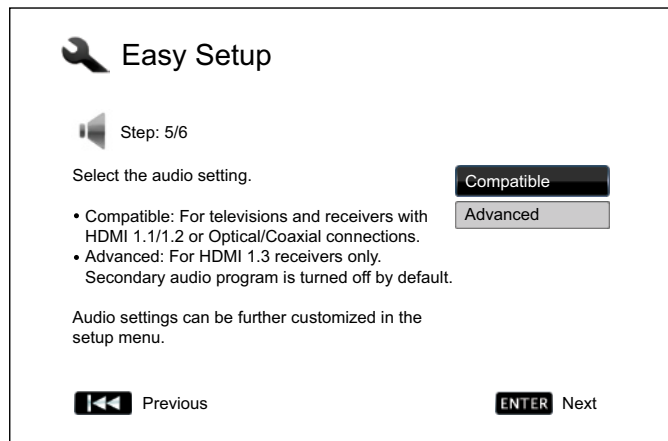
The "**Compatible**" setting configures audio output in a way that is generally compatible with all types of equipment and content. If you connect the player to a television directly, or to a receiver with an HDMI 1.1/1.2 or optical/coaxial input, selecting the "**Compatible**" setting is recommended. When menu click sound and Secondary Audio Program are presented in the content, those will be mixed into the audio output.

The "**Advanced**" setting configures audio output to send the original main audio content to a connected receiver for decoding and reproducing. It requires a receiver capable of decoding all high bit rate audio formats. ~~If you connect the player to a receiver supporting HDMI 1.3 and high bit rate audio formats, selecting the "Advanced" setting is recommended.~~ Menu click sound and Secondary Audio Program ~~are turned off by default to preserve the original quality of the main audio content.~~

Press the **UP/DOWN ARROW** buttons to select one of the audio setting choices, and then press the **ENTER** button. The two basic audio setting choices may not cover all situations. You can further customize the audio settings using the player's Setup Menu.

Complete the Easy Setup Wizard

Easy Setup

Step: 6/6

Easy Setup Wizard completed.

Press the Enter button to exit.

⏮ Previous   ENTER Finish
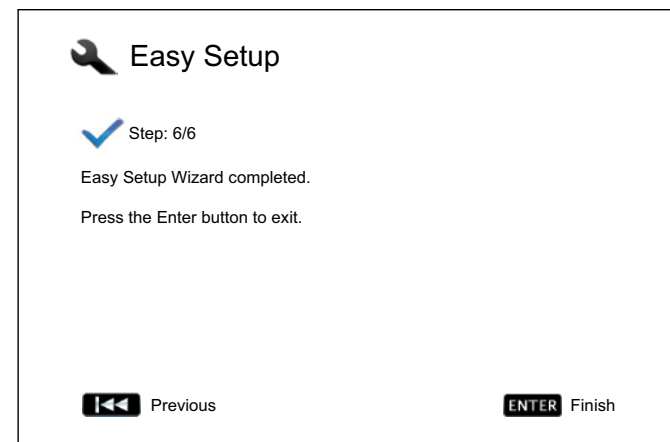
Once you have selected the audio setting, the initial Easy Setup Wizard is completed.

Press the **ENTER** button to close the Easy Setup Wizard. Your player is now ready for use. You will see a background screen with a Lexicon and Blu-ray Disc logo. Please follow the rest of the User Manual for basic and advanced operations. Enjoy your new Lexicon Blu-ray Disc Player!

3

Basic Operations

Disc Playback

BD   DVD   SACD   CD

1. Press the **POWER** button to turn on the player.
2. Press the **OPEN/CLOSE** (**OPEN**) button to eject the disc tray.
3. Place the disc with the label side facing up and the recorded side facing down.
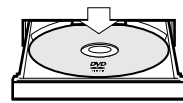
4. Press the **OPEN/CLOSE** (**OPEN**) button again to retract the tray.

5. The player will read the disc information and starts playback.
6. Depending on the content of the disc, a menu or navigation screen may appear. Please use the navigation **ARROW** and **SELECT** buttons to select the content to play.
7. To stop playback, press the **STOP** button.
8. To turn off the player, press the **POWER** button.

Note
- *During DVD and some Blu-ray Disc playback, pressing the **STOP** button for the first time brings the player to a pre-stop mode. You can resume playback from the stopped point by pressing the **PLAY** button. This pre-stop mode allows you to change the player settings and then resume playback. To completely stop playback, press the **STOP** button twice.*

- *Certain Blu-ray Discs with BD-Java technology do not support the pre-stop mode. Pressing the **STOP** button during playback of such discs will completely stop the disc. Pressing the **PLAY** button once the disc is stopped will restart it from the very beginning.*

- *This unit consumes a tiny amount of power even when it is turned off to STANDBY mode. If it is not to be used for a long time, unplug it from the household AC outlet.*

Pause and Frame-by-Frame   BD   DVD   SACD   CD
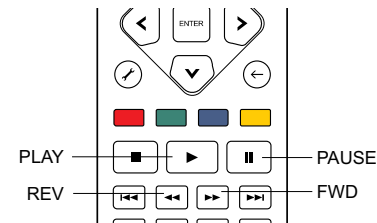
1. During playback, press the **PAUSE** button to temporarily pause the program. In this mode, a PAUSE icon will appear on the TV screen.

2. While a DVD or Blu-ray Disc is paused, press the **REV** or **FWD** button to reverse or advance the video frame-by-frame.
3. Press the **PLAY** button to resume normal playback.

Note
If the screen saver is set to "On" or "Energy Saver" (please refer to page 57 for details), after pausing for 3 minutes the player will activate the screen saver.

Blu-ray Disc Menu Playback

TOP MENU
ARROW BUTTONS
COLOR BUTTONS
POP-UP MENU
ENTER
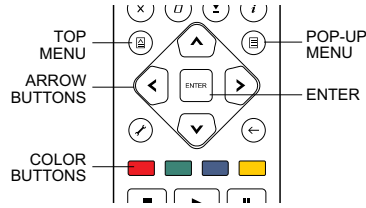
1. Blu-ray Discs usually contain a Top Menu and a Pop-up Menu. The Top Menu normally appears at the beginning of the playback, after the previews and copyright messages.

The Pop-up Menu can be accessed during the movie without interrupting playback.

2. During playback, press the **POP-UP MENU** button to access the Pop-up Menu. Press the **TOP MENU** button to access the Top Menu.

3. Navigate the menu using the **ARROW** buttons, and then press the **ENTER** button to make the selection.

4. Some menus make use of the **COLOR** buttons. You can select menu functions by pressing the corresponding **COLOR** button on the remote control.

DVD Menu Playback

TOP MENU (TITLE)
ARROW BUTTONS
POP-UP MENU (MENU)
ENTER
RETURN
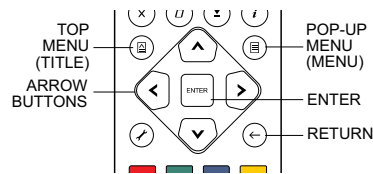
1. Some DVD discs contain title menu or chapter menu functions.

2. During playback, press the **TOP MENU** button to return to the disc title menu. Press the **POP-UP MENU** button to display the chapter menu. Depending on the disc, one or both menus may not exist.

3. Navigate the menu using the **ARROW** buttons, and then press the **ENTER** button to make the selection.

4. Press the **RETURN** button to return to the previous menu. The return location varies by disc.

PAGE UP/DOWN
DISPLAY

On-Screen Display
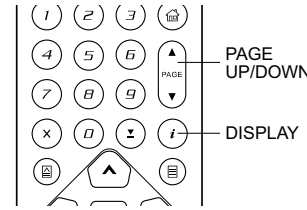
1. During the playback of a DVD or Blu-ray Disc, press the **DISPLAY** button on the remote control to show status information. For CD and SACD, the status information is shown automatically.

2. While the status information is shown, press the **PAGE UP/DOWN** buttons to scroll through several display formats. The playback time information displayed on the front panel changes together with the on-screen display.

3. Press the **DISPLAY** button again to hide the on-screen display. The playback time information display on the front panel will remain in the selected format.

The following display formats are available:

DVD and Blu-ray Disc:

- Title elapsed time	- Chapter elapsed time
– - Title remaining time	– - Chapter remaining time

CD and SACD:

- Track elapsed time	- Disc elapsed time
– - Track remaining time	– - Disc remaining time

Volume Control BD DVD SACD CD
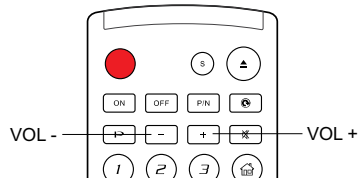
1. For normal audio volume adjustment, it is recommended that you use the volume control on your TV or receiver/amplifier.

VOL -   VOL +

2. The **VOL** +/- buttons on the player remote control are provided as an alternative way of controlling the audio volume. It is recommended that you use this control to make the audio volume from the player the same as from other sources, such as TV programs or a VCR.
   • Press the **VOL –** button to decrease the volume.
   • Press the **VOL +** button to increase the volume

Note
The volume control does not apply to digital audio output in raw bitstream format. However, when the volume is decreased to 0, all audio output will be muted.

Mute BD DVD SACD CD
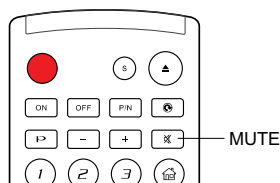
1. Press the **MUTE** button on the remote control during content playback to turn off audio output. The TV screen displays a mute icon. The front panel MUTE indicator will also light up.

MUTE

2. Press the **MUTE** button again to resume audio output.

Note
*Check the MUTE status on the front panel display of the player when there is no audio output. You may also press the **MUTE** button to verify the MUTE status.*

Audio Language/Track Selection BD DVD
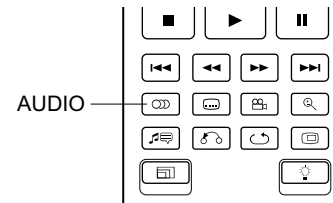
AUDIO

1. To select the audio language or track, press the **AUDIO** button on the remote control during playback.
2. Repeat pressing the **AUDIO** button to circle through all available language or audio tracks.

Note
Availability of languages and audio channels varies by disc.

Subtitle Selection BD DVD
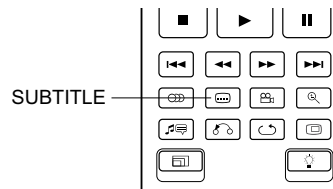
SUBTITLE

1. When playing a DVD, Blu-ray Disc or other video programs recorded with subtitles, press the **SUBTITLE** button on the remote control to select the desired subtitle.

2. Repeat pressing the **SUBTITLE** button to circle through all available subtitles.

3. To turn off subtitles, repeat pressing the **SUBTITLE** button until the subtitle is turned off.

Note
Availability of subtitles varies by disc and content.

Angle Selection
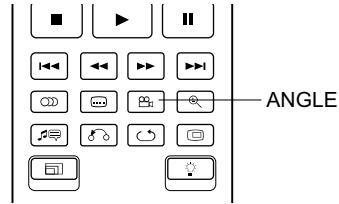
1. When playing a DVD or Blu-ray Disc, an angle mark will be displayed on the screen when the player detects scenes recorded with multiple angles:

The angle mark is also presented on the front panel display.

2. Press the **ANGLE** button on the remote control to select the desired playing angle.

3. To resume normal playback, repeat pressing the **ANGLE** button until the default angle is displayed.

Note
*   *This function is available only when the discs are recorded with multiple angles.*

*   *The angle mark on the screen can be turned off using the Setup Menu of the player (see page 45).*

Picture-in-Picture and Secondary Audio
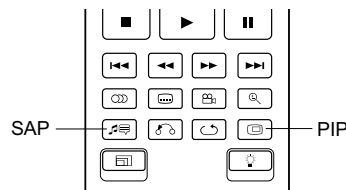
1. Certain Blu-ray Discs contain secondary video (Picture-in-Picture, or PIP) and secondary audio. This feature is often called BONUSVIEW. When such a disc is played, a Picture-in-Picture mark (PIP Mark) and a Secondary Audio Program mark (SAP Mark) may be displayed on the screen to alert you to the availability of the secondary audio/video content.

2. The disc menu usually features interactive controls to turn on/off the Picture-in-Picture video and Secondary Audio Program. Please use those controls to select the desired secondary audio/video content.

3. There is a **PIP** button on the remote control. If the disc menu does not offer interactive Picture-in-Picture controls, please use this button to turn on/off Picture-in-Picture or select from multiple secondary video programs.

4. There is also a **SAP** button on the remote control. If the disc menu does not offer interactive secondary audio controls, please use this button to turn on/off Secondary Audio Program or select from multiple secondary audio tracks. Secondary Audio Programs are generally only available when Picture-in-Picture is shown.

Note
*   *This function is available only when the discs are recorded with secondary video and audio programs.*

*   *Discs may not always be played back according to the **PIP** and **SAP** buttons. Certain discs can ignore or override the remote control commands.*

*   *The PIP and SAP Marks on the screen can be turned off using the Setup Menu of the player (see page 50).*

BD-Live

Some Blu-ray Disc titles are released with the BD-Live feature. BD-Live offers extra downloadable contents and additional online interactive programs. The available BD-Live contents vary by discs and studios, and may include additional subtitles, commentaries, preview trailers, games, and online chat. The player needs to be connected to the Internet in order to play BD-Live contents (see page 20).

Depending on how the studios organize their BD-Live contents, some Blu-ray Discs may start downloading BD-Live contents when playback starts; some have a BD-Live selection on its main menu; some may show a prompt to ask whether you would like to start downloading; and some may ask you to sign up for a membership or account. Please follow the instructions that come with the disc to enjoy BD-Live contents.

Your Internet connection speed, the overall Internet traffic situation and the capacity of the BD-Live content servers can all affect how fast BD-Live contents can be downloaded. If you encounter slow downloading or intermittent playback, please play the disc without accessing the BD-Live features, or try again at a different time.

When you use the BD-Live feature, the player or disc ID and your IP (Internet Protocol) address may be sent to the content provider via the Internet. Generally, no personally identifiable information is sent. However, technologies exist to match your IP address to a certain geographical area or service provider. Your Internet service provider also has the knowledge of who is using which IP address. If the BD-Live content provider requires you to login using a membership or account, the content provider will have access to your membership or account information. Please check with your Internet service provider and the BD-Live content providers for their privacy policy.

You can choose to restrict BD-Live access using the player's Setup Menu (see page 71).

4

Advanced Operations

TV System Selection

While you may want to set the video output system (NTSC/PAL) to the same as that supported by your TV, realize that the Lexicon Blu-ray Disc Player will convert any content that is not in the correct format your TV understands. The default output is NTSC for North America.

Press the **P/N** button on the remote control to cycle the video output to PAL, NTSC or "Multi" system. The TV screen displays the selected system name.

Some points to keep in mind:

• When the video output is set to PAL or NTSC system, the player will convert the disc content to the selected system.

• When the video output is set to "Multi", the player will not perform system conversion. The "Multi" mode is only to be used if your TV supports both NTSC and PAL systems.

• Most TV sets only support one of the NTSC or PAL systems. If the wrong output is selected, the TV may not display a picture. In this case repeatedly press the **P/N** button until a supported system is selected.

• The output system selected with the **P/N** button will be remembered when the player is turned off. The output system selection can also be done by setting the "**TV System**" item in the "Video Setup" section of the player's Setup Menu. (Refer to page 52 for details.)

Output Resolution

The Lexicon BD-30 Blu-ray Disc Player supports multiple output resolutions. For detailed discussion on how to choose the best output resolution, please refer to the Select the Best Output Resolution section on page 23 of this manual.
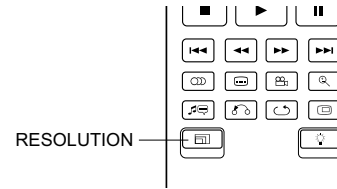
If you would like to change the output resolution, you may do so by pressing the **RESOLUTION** button on the remote control:

1. Make sure the video cable is properly connected.

2. Turn on the TV. Adjust the TV to use the proper input (HDMI, DVI or Component).

3. Make sure that the player is turned on. Although the output resolution can be changed "on the fly", it is recommended that you stop playback and take out the disc before changing the output resolution. Press the **RESOLUTION** button. A "Resolution Setting" menu appears on the TV screen. In case the TV does not support the current resolution and you cannot see the "Resolution Setting" menu, the current resolution is also displayed on the front panel.

4. Use the **UP/DOWN ARROW** buttons to select the new output resolution. You may also press the **RESOLUTION** button multiple times to cycle through the available output resolutions. The new resolution is displayed on the front panel just in case you cannot see the "Resolution Setting" menu.

5. Press the **ENTER** button to apply the selected output resolution. Or, if you do not want to change the output resolution, press the **RETURN** button to exit.

The following output resolutions are available:

NTSC output via HDMI:

Auto → 1080p(60Hz/24Hz) → 1080i 60Hz → 720p 60Hz → 480p → 480i → Source Direct

PAL output via HDMI:

Auto → 1080p(50Hz/24Hz) → 1080i 50Hz → 720p 50Hz → 576p → 576i → Source Direct

NTSC output via component:

> 1080p 60Hz* → 1080i 60Hz → 720p 60Hz → 480p → 480i

PAL output via component:

> 1080p 50Hz* → 1080i 50Hz → 720p 50Hz → 576p → 576i

* When 1080p is selected ~~for the component output~~ HDMI output resolution will be 1080p and component output resolution will be 1080i.

Note

• *Some TV sets do not support one or more output resolutions (particularly 1080p). If an incompatible output resolution is selected, you will get a blank screen or an error message. In this case please select an output resolution that is supported by the TV.*

• *In case you are not able to get a picture using the HDMI or component output, please connect the player to the TV using the composite video output, then use the Setup Menu to adjust the player settings.*

• *Video up-conversion over the component output is only available for unencrypted discs such as home video and consumer-created contents. Most commercially pressed DVD discs are CSS-encrypted and will be limited to 480i/480p resolution. This restriction applies to the component output only. The HDMI output is protected with HDCP and has no such restriction.*

Zooming and Aspect Ratio Control
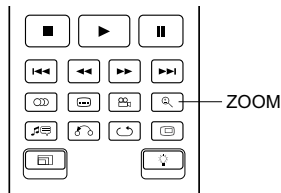
ZOOM

This feature zooms in or out of the displayed frame and also changes the aspect ratio (image width vs. height).

To change the zoom level, press the **ZOOM** button on the remote control. Each press of the **ZOOM** button will switch the zoom level in sequence.

Zoom Levels for HDMI Output

The following zoom levels are available when "**Primary Output**" is set to "**HDMI**":

> 1:1 (No zooming) → Stretch/Letterbox/Pillar Box → Full Screen → Under Scan → 1.2 → 1.3 → 1.5 → 2.0 → ½ → Back to 1:1 again

The zoom level is reset to 1:1 when the disc is ejected, or when the player is turned off.

The available zoom levels depend on the "**TV Aspect Ratio**" setting in the Setup Menu and the aspect ratio of the DVD or Blu-ray Disc. The following zoom levels may be useful for some special applications:

1) Playing 16:9 BD or DVD when "**TV Aspect Ratio**" is set to "**16:9 Wide**" or "**16:9 Wide/Auto**"

• Stretch – The image is vertically stretched by 1.33 times. For movies with 2.35:1 aspect ratio, this zoom level cuts off the black borders at the top and bottom of the image. Users of projector with anamorphic lens may find this mode helpful.

Original 2.35:1 Widescreen Movie
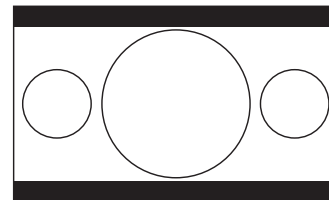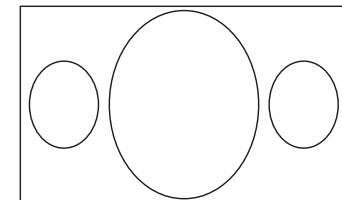
"Stretch" Zoom

Projected through an Anamorphic Lens
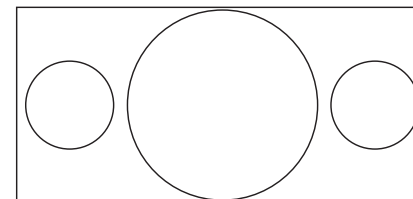
- Full Screen – The image is stretched by 1.33 times for both vertical and horizontal directions. For movies with 2.35:1 aspect ratio, this zoom level cuts off the black borders at the top and bottom of the image while maintaining the correct aspect ratio. The left and right sides of the image are slightly cropped.

Original 2.35:1 Widescreen Movie   **"Full Screen" Zoom**

1:1   **"Pillar Box" Zoom**

"Full Screen" Zoom
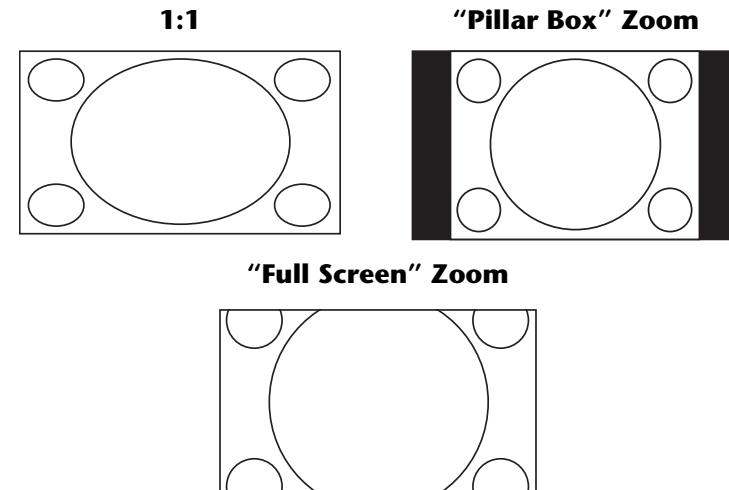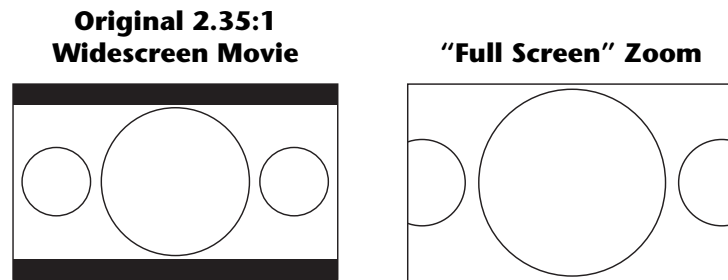
2) Playing 4:3 BD or DVD when "**TV Aspect Ratio**" is set to "**16:9 Wide**"

- 1:1 - The image fills up the entire 16:9 screen but is horizontally stretched. Figures may look shorter and wider than they should be.

- Pillar Box – The player maintains the correct 4:3 aspect ratio and adds borders to the left and right sides of the image. The brightness level of the borders can be set by the "**Border Level**" setting in the "**Picture Adjustment**" section of the Setup Menu.

- Full Screen – This zoom level maintains the correct aspect ratio but crops the top and bottom slightly in order to fit the 4:3 image to the 16:9 screen.

3) Playing 4:3 BD or DVD when "**TV Aspect Ratio**" is set to "**16:9 Wide/Auto**"

- 1:1 – The player maintains the correct 4:3 aspect ratio and adds borders to the left and right sides of the image.

- Stretch – The image is horizontally stretched by 1.33 times. This zoom level fills up the 16:9 screen, but figures may look shorter and wider than they should be.

- Full Screen – This zoom level maintains the correct aspect ratio but crops the top and bottom slightly in order to fit the 4:3 image to the 16:9 screen.

1:1

"Stretch" Zoom

"Full Screen" Zoom
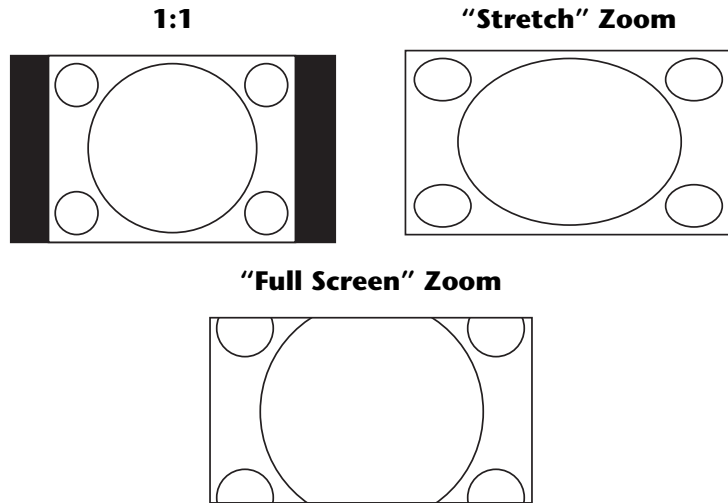
Note
- *Some early DVD titles (released from 1997 until early 2000s) use a 4:3 non-anamorphic widescreen aspect ratio. When played on a 16:9 display, the content is shown in a small window with black borders on all four sides. The top and bottom borders are encoded into the video. The left and right borders are added by the player to maintain the correct aspect ratio. For this type of discs the "Full Screen" zoom mode can be used to eliminate the borders.*

4) Playing 16:9 BD or DVD when **"TV Aspect Ratio"** is set to **"4:3 Pan/Scan"**

- 1:1 – The player disregards the aspect ratio and fills the 4:3 screen. Figures may look taller and narrower than they should be.

- Letterbox – The player maintains the correct 16:9 aspect ratio and adds borders to the top and bottom of the image.

- Full Screen – The player maintains the correct aspect ratio but crops the left and right slightly in order to fit the 16:9 image to the 4:3 screen.

1:1

"Letterbox" Zoom

"Full Screen" Zoom
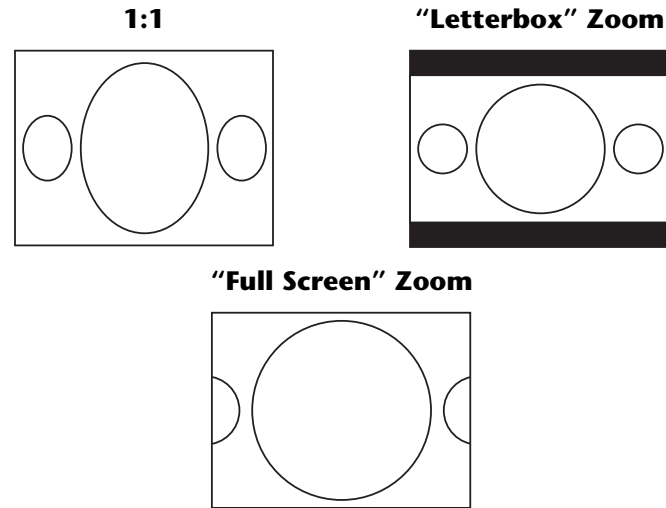
5) Playing 16:9 BD or DVD when **"TV Aspect Ratio"** is set to **"4:3 Letterbox"**

- 1:1 - The player maintains the correct 16:9 aspect ratio and adds borders to the top and bottom of the image.

- Stretch – The player disregards the aspect ratio and fills the 4:3 screen. Figures may look taller and narrower than they should be.

- Full Screen – The player maintains the correct aspect ratio but crops the left and right slightly in order to fit the 16:9 image to the 4:3 screen.

1:1

"Stretch" Zoom

"Full Screen" Zoom

Original 4:3 Non-anamorphic Widescreen Movie

"Stretch" Zoom

"Full Screen" Zoom
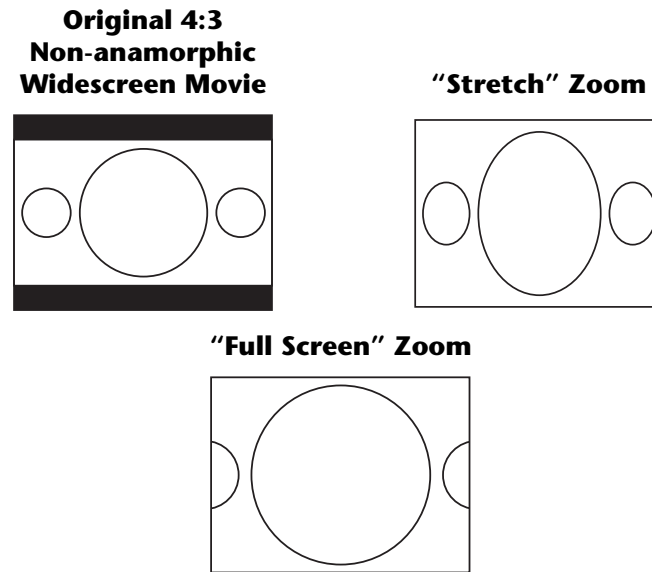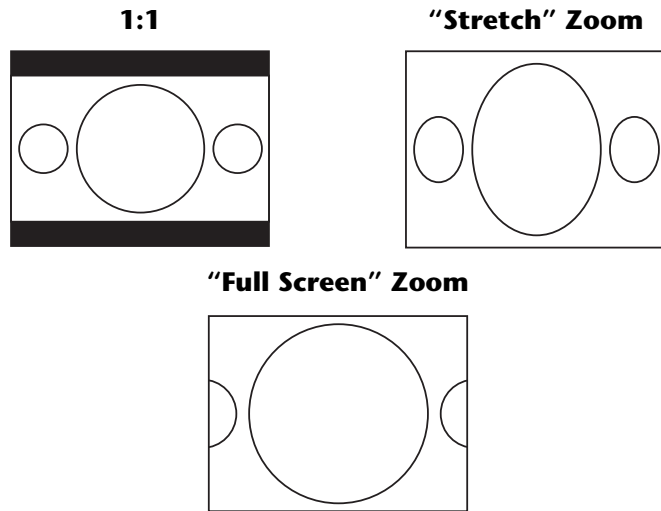
6) Playing 4:3 BD or DVD when "**TV Aspect Ratio**" is set to "**4:3 Pan/Scan**" or "**4:3 Letterbox**"

• Stretch – The image is vertically stretched by 1.33 times. For widescreen movies published in 4:3 non-anamorphic format, this zoom level cuts off the black borders at the top and bottom of the image. Figures may look taller and narrower than they should be.

• Full Screen - The image is stretched by 1.33 times for both vertical and horizontal directions. For widescreen movies published in 4:3 non-anamorphic format, this zoom level cuts off the black borders at the top and bottom of the image while maintaining the correct aspect ratio. The left and right sides of the image are slightly cropped.

The "Under Scan" zoom level shrinks the image by 5%. This zoom level may be used to compensate for TVs that over scan, so the viewer can see the entire image area with no cropping. All other zoom levels are indicated by their respective zoom ratio.

Zoom Levels for Component Video Output

The following zoom levels are available when "Primary Output" is set to "Component":

1.0 (No zooming) → 2X → 3X → 4X → ½ → ⅓ → ¼ → Back to 1.0 again

Note
• *The ZOOM feature may not be available when certain DVD or Blu-ray Discs are played because the disc author chooses to disable ZOOM.*

Fast Playback
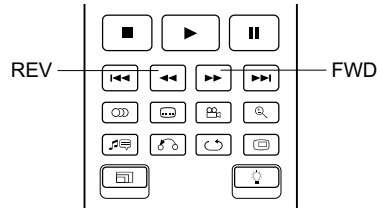
You may fast forward or reverse to search for a certain point during playback.

1. Press the **FWD** button on the remote control and the player starts fast forward playback. Each press of the **FWD** button switches the playback speed in the following sequence:

▶ ⇒ ▶ ⇒ ▶▶1 ⇒ ▶▶2
▶▶5 ⇐ ▶▶4 ⇐ ▶▶3 ⇐

2. Press the **REV** button on the remote control and the player starts fast reverse playback. Each press of the **REV** button switches the playback speed in the following sequence:

▶ ⇒ ▶ ⇒ ◀◀1 ⇒ ◀◀2
◀◀5 ⇐ ◀◀4 ⇐ ◀◀3 ⇐

Note
• *Certain Blu-ray Discs utilizing the BD-Java technology may have their own fast forwarding and reversing control. The actual speed varies by disc, and a progress scale may be displayed by the disc.*

Repeat Playback
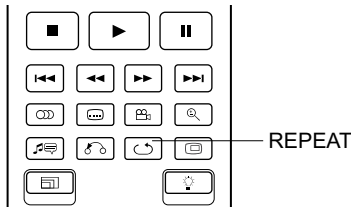
To repeat a certain chapter, title, track or disc, press the **REPEAT** button on the remote control.

Each press of the **REPEAT** button switches the repeat mode in the following sequence:

DVD:

⇒ Repeat Chapter ⇒ Repeat Title ⇒ Repeat All ⇒ Repeat Off

Blu-ray Disc:

⇒ Repeat Chapter ⇒ Repeat Title ⇒ Repeat Off

CD and SACD:

⇒ Repeat One ⇒ Repeat All ⇒ Repeat Off
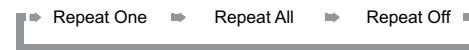
Note
• *Certain Blu-ray Discs may not allow for repeating.*

Repeat a Selected Section
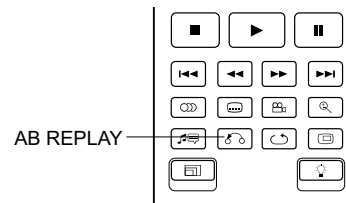
To repeatedly play a specified section, please follow these steps:

1. During normal playback, press the **AB REPLAY** button on the remote at the desired beginning point (Point A) for the repeat play. The TV screen displays "A-".

2. When playback reaches the desired ending point (Point B) for the repeat play, press the **AB REPLAY** button again. The player now repeatedly plays back the specified section (A-B). The TV screen displays "A-B".

3. Press the **AB REPLAY** button for the third time to resume normal playback.

Note
Not available for all disc formats or contents. Certain Blu-ray Discs may not allow for repeating.

Shuffle and Random Playback
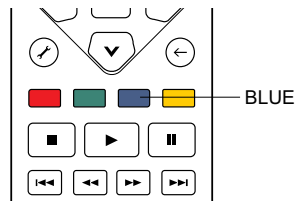
When playing a CD or SACD, press the **BLUE** button on the remote control to activate the **Shuffle** and **Random** modes. Each press of the **BLUE** button switches the playback mode in the following sequence:

Shuffle ➡ Random ➡ Normal

In normal playback mode, each track is played back in sequential order. As the name implies, the **Random** playback mode randomly selects a track to play. The **Shuffle** mode also plays back the tracks in random order, but it ensures that each track is played only once.

Selecting the **Shuffle** or **Random** mode cancels any **Repeat** mode you may be using. Similarly, selecting a **Repeat** mode cancels any **Shuffle** or **Random** mode.

Playback by Chapter or Track Number
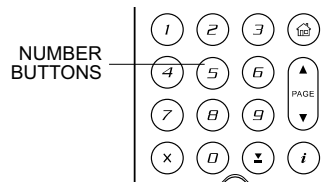
During the playback of a disc, you can use the **NUMBER** buttons on the remote control to directly jump to a specified chapter or track number. For example:

- To select the seventh track, press the **[7]** button.

- To select the 16th track, press **[1]** followed by **[6]** in quick succession:
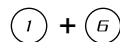
Note
- *Certain Blu-ray Discs may not allow for direct chapter selection.*

40

Playback from a Specific Location

DVD and Blu-ray Discs
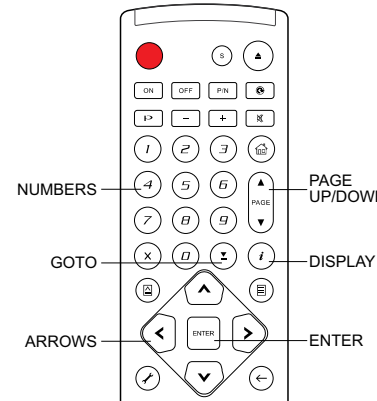
During the playback of a DVD or Blu-ray Disc, you may specify a location to start playback by entering the title, chapter or time directly. Press the **GOTO** button to bring up the on-screen display.

On top of the video screen, the on-screen display information has the following components: (from left to right) Playing Status, Title, Chapter, Time Counter, Progress Indicator, and Total Time. After pressing the **GOTO** button for the first time, the cursor will be positioned at the Time Counter. This is the "Time Search" mode. Each subsequent press of the **GOTO** button switches the search mode in the following sequence:

Time Search ➡ Chapter Search ➡ Title Search ➡ Display

| ▶ | 1 / 7 | 5 / 25 | 00:22:14 | 00:40:06 |
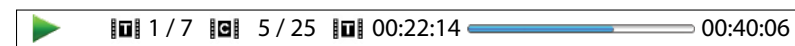
1. **Title time search.** For example, search for a specified time within the currently playing title.

   - Press the **GOTO** button to bring up the on-screen display. The cursor will be positioned at the Time Counter. Use the **NUMBER** or **ARROW** buttons to enter the hours, minutes and seconds for your specified search and press the **ENTER** button.

| ▶ | 1 / 7 | 5 / 25 | 00:22:14 | 00:40:06 |
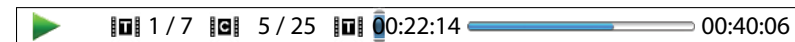
2. **Chapter time search.** For example, search for a specified time within the currently playing chapter.

- Press the DISPLAY button to bring up the on-screen display. Use the PAGE UP or PAGE DOWN button to switch the display to chapter time mode. You will see that the icon to the left of the Time Counter changes from the Title icon to the Chapter icon. Press the **GOTO** button to position the cursor at the Time Counter. Use the **NUMBER** or **ARROW** buttons to enter the hours, minutes and seconds for your specified search and press the **ENTER** button.

▶ T 1 / 7 C 5 / 25 C 00:06:48 ▬▬▬▬▬▬▬ 00:08:33
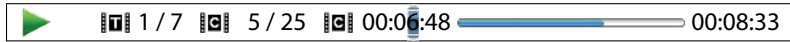
3. **Chapter search.** For example, search for Chapter 7 of the currently playing title.

- Repeatedly press the **GOTO** button until the cursor is positioned at the Chapter location. Use the **NUMBER** or **ARROW** buttons to enter or select Chapter 7 and press the **ENTER** button.

▶ T 1 / 7 C 5 / 25 T 00:22:14 ▬▬▬▬▬▬▬▬ 00:40:06
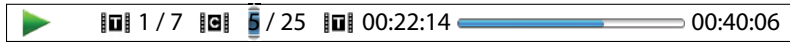
4. **Title search.** For example, search for Title 6 of the currently playing disc.

- Repeatedly press the **GOTO** button until the cursor is positioned at the Title location. Use the **NUMBER** or **ARROW** buttons to enter or select Title 6 and press the **ENTER** button.

▶ T 1 / 7 C 5 / 25 T 00:22:14 ▬▬▬▬▬▬▬▬ 00:40:06
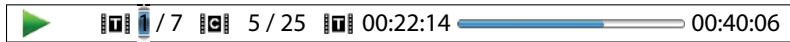
Note
- *Some discs may prohibit the search operation. You will not be able to select a search location, or you may get an "invalid operation" icon after specifying a search location.*
- *Some Blu-ray Discs feature their own search function. Please follow the on-screen instructions to use the search function provided by such discs.*

CD and SACD discs

You may specify a point to start playback by entering the disc elapsed time, track elapsed time or track number directly. When playing CD and SACD discs, the on-screen display automatically shows on the TV screen:

▶ ♫ 1 / 8 ♫ 00:08:16 ▬▬▬▬▬▬ 00:12:33
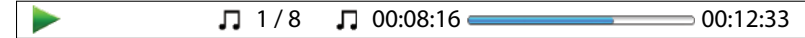
The on-screen display has the following components: (from left to right) Playing Status, Track Number, Time Counter, Progress Indicator, and Total Time.

To specify a playback location using one of the following search modes, press the **GOTO** button. Each press of the **GOTO** button switches the search mode in the following sequence:

⇢ Time Search ⇢ Track Search
Display ⇠

1. **Track time search.** For example, search for a specified time within the currently playing track.

- Press the **GOTO** button to place the cursor on the track Time Counter. Use the **NUMBER** or **ARROW** buttons to enter the hours, minutes and seconds for your specified search and press the **ENTER** button.

▶ ♫ 1 / 8 ♫ 00:08:16 ▬▬▬▬▬▬ 00:12:33

2. **Disc time search.** For example, search for a specified elapsed time of the entire disc.

- While the on-screen display is shown, press the **PAGE UP** or **PAGE DOWN** button to switch the Time Counter to disc time mode. Press the **GOTO** button to place the cursor on the disc Time Counter. Use the **NUMBER** or **ARROW** buttons to enter the hours, minutes and seconds for your specified search and press the **ENTER** button.

▶ ♫ 5 / 8 ◉ 00:40:46 ▬▬▬▬▬▬ 01:02:33

3. **Select a track.** For example, search for Track 6 of the currently playing disc.

   • Repeatedly press the **GOTO** button until the cursor is placed on the Track Number position. Use the **NUMBER** or **ARROW** buttons to enter or select Track 6 and press the **ENTER** button.

   | ▶ | ♪ **1** / 8   ♪ 00:08:16 ▭▭▭▭▭▭▭▭ 00:12:33 |

Memory and Automatic Resume

POWER — OPEN
STOP — PLAY

1. The player automatically remembers the current position when playback is interrupted. Operations such as **OPEN**/**EJECT** or turning **POWER** off will cause the player to save the current playing position.

2. The position is memorized even after turning off the unit or changing the disc.

3. When the next time the disc with a memorized playing position is played back, the player will recognize the saved playing position. Playback will automatically resume from this saved position. However, if you wish to cancel the automatic resume and start playback from the beginning, you may press the **STOP** button when prompted.

4. The player can remember playback position for up to 5 discs. When the sixth disc is memorized, the oldest one is replaced.

Note
• *Some Blu-ray Discs do not support resuming and will always play from the beginning.*

Pure Audio Mode

PURE AUDIO

You can enjoy higher-quality audio by turning off the video processing and output. The Pure Audio mode reduces any potential interference between the video and audio signals.

1. Press the **PURE AUDIO** button on the remote control to turn off video and enter Pure Audio mode. Video output will be turned off. The "PURE" icon will be illuminated on the front panel of the player.

2. Press the **PURE AUDIO** button again to resume video and cancel Pure Audio mode.

Note
• *Pure Audio mode is automatically cancelled when the unit is switched off or when playback is stopped.*

• *Since HDMI carries audio together with video, the HDMI video signal cannot be completely turned off. A black screen is transmitted instead to minimize any potential interference.*

5

Media File Playback

In addition to playing standard disc-based formats such as Blu-ray Disc, DVD, CD and SACD, the Lexicon BD-30 Blu-ray Disc Player can play media files. You can enjoy digital music, movies and photos stored on an optical disc (recordable CD or DVD) or a USB drive. Due to the variation of media, encoding software and techniques used, compatibility cannot be guaranteed for all user-created or downloaded contents. Support for such contents is on a best-effort basis.

Playback from a USB Drive

The Lexicon BD-30 Blu-ray Disc Player is equipped with two USB ports, one on the front panel and the other on the back. You may use either to plug in a USB drive stored with digital music, movie and photo files.

The USB ports are rated to provide a maximum of 5V, 500mA power to the USB drive. It is sufficient for all USB thumb drives and flash memory card readers, but may not be sufficient for USB hard disks. It is recommended that you use a USB hard disk with an external power supply.

Note
- *This unit supports "USB Mass Storage Class Bulk-Only Transport" devices only. Most USB thumbs drives, portable hard disk drives and card readers conform to this device class. Other USB devices such as MP3 players, digital cameras, and mobile phones may not be compatible.*

- *Supported USB drives must be formatted with the FAT (File Allocation Table) or FAT32 file system. Drives formatted with NTFS file system are not supported.*

- *In some cases, an incompatible USB device may cause the player to stop responding. If this occurs, simply turn off the power, remove the USB device, and turn the player back on.*

- *The player accesses the USB drive in read-only mode. In order to minimize the risk of data corruption, it is recommended that you only unplug the USB device when playback is completely stopped.*

The Home Menu
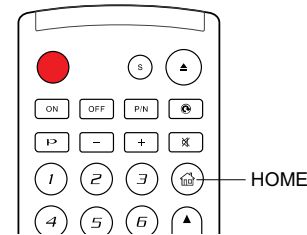
When a USB drive or an optical disc stored with media files is inserted, the player presents a "Home Menu" to assist you in navigating and playing the files. You can also bring up the Home Menu with the **HOME** button on the remote control. The Home Menu is the starting point for accessing media files.
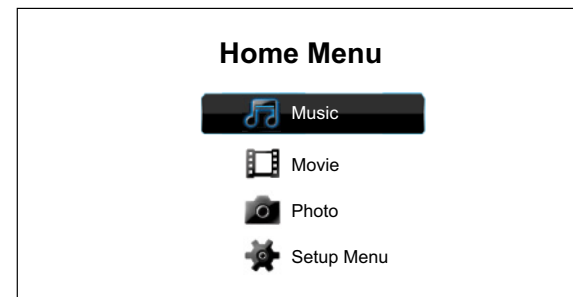
There are four selections in the Home Menu. Depending on what type of media files that you intend to play, you can choose among the "Music," "Movie" and "Photo" categories. The "Setup Menu" selection will bring you to the player's Setup Menu just like pressing the **SETUP** button on the remote control.

Playing Music Files

To play digital music files stored on an optical disc or USB drive, select "Music" from the Home Menu. A file browser will appear to assist you in navigating the files and folders.

The first step is to select the "Data Disc" or USB device that contains the music files. The player will take a moment to read the disc and list the folders and music files.
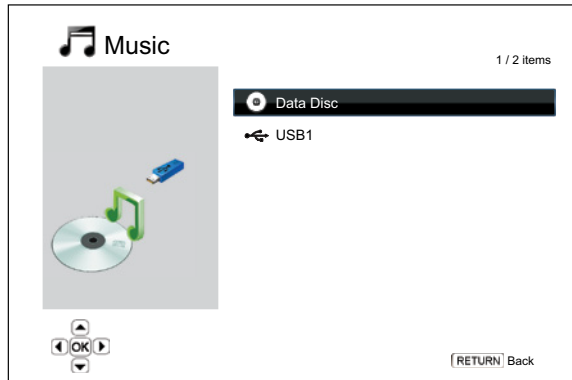
In the music browser, you can perform the following operations:

- Press the **UP/DOWN ARROW** or **PAGE UP/DOWN** buttons to move the cursor and select music files.

- When a music file is highlighted by the cursor, press the **ENTER** or **PLAY** button to start playback.

- Press the **GREEN** color button to add the currently highlighted music file to the Playlist. A green checkmark will appear in front of the file name, and the Playlist count in the lower left corner of the screen will increase by one.

- Press the **LEFT ARROW** button to move the cursor to the Selection Menu in the lower left corner of the screen. This menu contains the following choices:
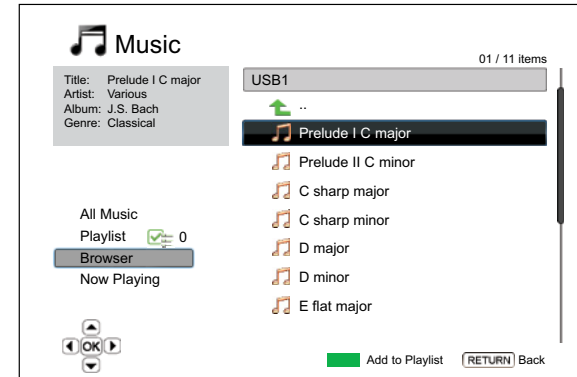
o **All Music** – List all music files in a flat view without any directory structure.

o **Playlist** – List only music files added to the Playlist.

o **Browser** – List folders and music files according to the original directory structure on the disc or USB drive.

o **Now Playing** – Show the status of the currently playing music file.

o Press the **RIGHT ARROW** button to move the cursor back to the file listing.

If a music file starts playing and there is no other user operation, the "Now Playing" screen will appear after a few seconds. You can also get to this screen using the "Now Playing" menu. This screen can show the following information:

- Playback status: Play, Stop, Pause

- Playback mode: Shuffle, Random, Repeat One, Repeat All

- Playback progress: track and time

- Other embedded information: If the music file contains supported album art image and tags, those will be displayed.
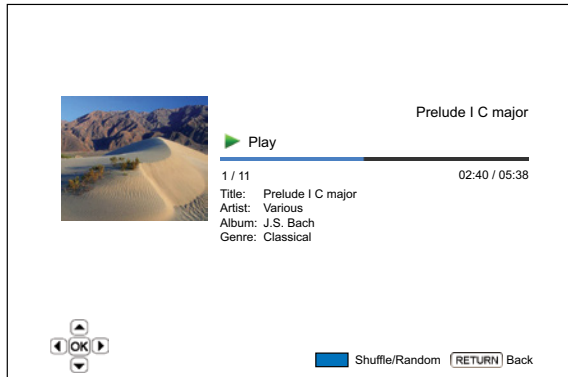
The following operations are available while the "Now Playing" screen is shown:

- Normal playback control: **PLAY**, **STOP**, **PAUSE**, **SKIP PREV/NEXT**, **REV**, and **FWD**

- Special playback mode: **REPEAT** and Shuffle/Random (**BLUE** color button)

- Return to the Browser without stopping the music: **RETURN**

- Stop playback and return to the Browser: Press **STOP** twice

Playing Movie Files
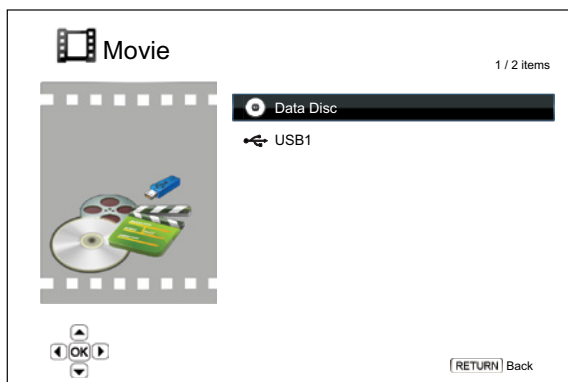
To play movie files stored on an optical disc or USB drive, select "Movie" from the Home Menu. A file browser will appear to assist you in navigating the files and folders.

The first step is to select the "Data Disc" or USB device that contains the movie files. The player will take a moment to read the disc and list the folders and movie files.
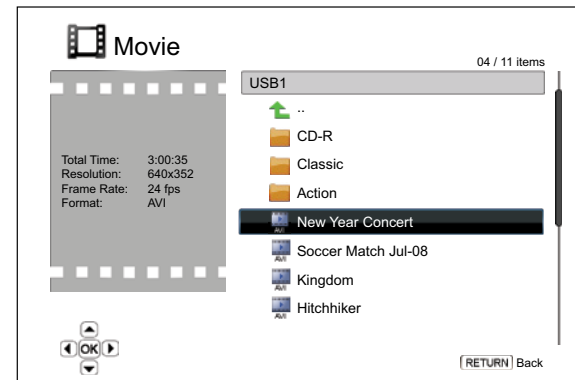
In the movie browser, you can perform the following operations:

- Press the **UP/DOWN ARROW** or **PAGE UP/DOWN** buttons to move the cursor and select movie files.

- When a movie file is highlighted by the cursor, press the **ENTER** or **PLAY** button to start playback.

Once a movie file starts playing, the normal playback control functions are available. To stop the movie and return to the file browser, press **STOP** twice. You can also press the **HOME** button at any time to get back to the Home Menu.

Viewing Photo Files

To view digital photo files stored on an optical disc or USB drive, select "Photo" from the Home Menu. A file browser will appear to assist you in navigating the files and folders.

The first step is to select the "Data Disc" or USB device that contains the photo files. The player will take a moment to read the disc and list the folders and photo files.
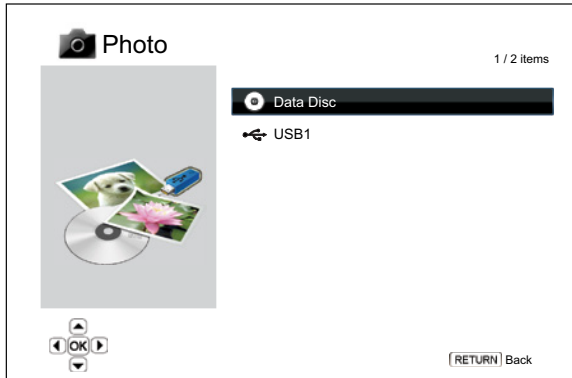
In the photo browser, you can perform the following operations:

*   Press the **UP**/**DOWN ARROW** or **PAGE UP**/**DOWN** buttons to move the cursor and select photo files.

*   When a photo file is highlighted by the cursor, press the **ENTER** or **PLAY** button to start playback in a full screen slideshow fashion.
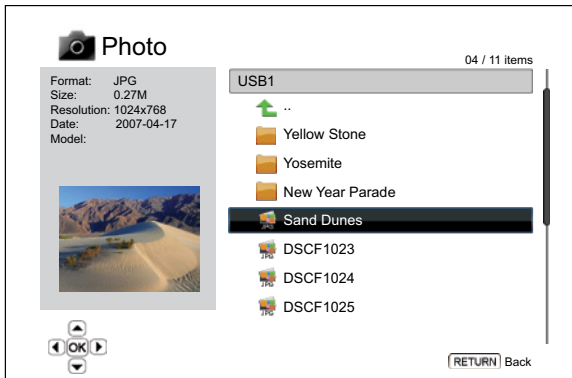
The following operations are available during the photo slideshow:

*   Show the help screen: **DISPLAY**

*   Normal playback control: **PLAY**, **STOP**, **PAUSE**, and **SKIP PREV**/**NEXT**

*   Adjust slideshow speed: **REV** and **FWD**

*   Zoom: **ZOOM**. Once in a zoom mode, the **ARROW** buttons can be used to pan the photo.

*   Reflect (flip the photo along its horizontal axis to make it upside-down): **UP ARROW**

*   Mirror (flip the photo along its vertical axis to make it a mirror image): **DOWN ARROW**

*   Rotate left (counterclockwise): **LEFT ARROW**

*   Rotate right (clockwise): **RIGHT ARROW**

*   Repeat: **REPEAT**

*   Show photos in "Digest" mode: **RED** color button. The "Digest" mode shows the 9 photo thumbnails in a screen to make visual navigation easy.

*   Show EXIF information: **GREEN** color button

*   Play in random sequence: **BLUE** color button

*   Change slideshow transition effect: **YELLOW** color button.

Adding Background Music

You can add background music to the photo slideshow. To do so, you will need to prepare some digital music files. The music files can be stored on the same disk as the photos, or on a different USB drive. Start music playback first by selecting "Music" from the home menu. Once the music is playing, press the **HOME** button to get back to the home menu, and start the photo slideshow by selecting "Photo" in the usual manner.

6

Setup Menu Options

The Setup Menu of the Lexicon Blu-ray Disc Player presents many setup and configuration options. For most users, the default configuration will be sufficient and will not require any changes to the settings. However, if you need to configure the player to perfectly match your home theater settings and viewing preferences, please refer to the following sections for details about each configuration option.

Using the Setup Menu System

In many places of this guide, the player's Setup Menu needs to be adjusted to match your specific audio/video configuration. When performing menu adjustments, we will use the following terminology to indicate the location of the desired function:

Setup Menu Section > **Menu Item** > **Selection**

Setup Menu Section is the uppermost Setup Menu level. With the Lexicon BD-30 there are six (6) Setup Menu sections listed in the left column of the Setup Menu screen. They are: **Playback Setup**, **Video Setup**, **Audio Format Setup**, **Audio Processing**, **Device Setup**, and **Network Setup**.

Menu Item is the parameter to be adjusted which appears in the center column of the **Setup Menu**. Once you enter a **Setup Menu Section**, the list of **Menu Items** and their current value are displayed in a box.

Selection is the actual numeric or descriptive element that represents the change being made to the selected parameter. It is the item located to the right of its corresponding **Menu Item**.

A **Scroll Icon** appears at the top or bottom of the menu when there are more **Menu Items** or **Selections** than what can fit in a screen. You may use the **UP** and **DOWN ARROW** buttons to scroll the display in order to access additional items.

The preceding diagram should give a good description of the various elements and their context. In this screen we could, for example, instruct you to set the **PIP Mark** parameter to **Off** in the **Playback Setup** section. To indicate where we were, you would see the following: **Playback Setup** > **PIP Mark** > **Off**.
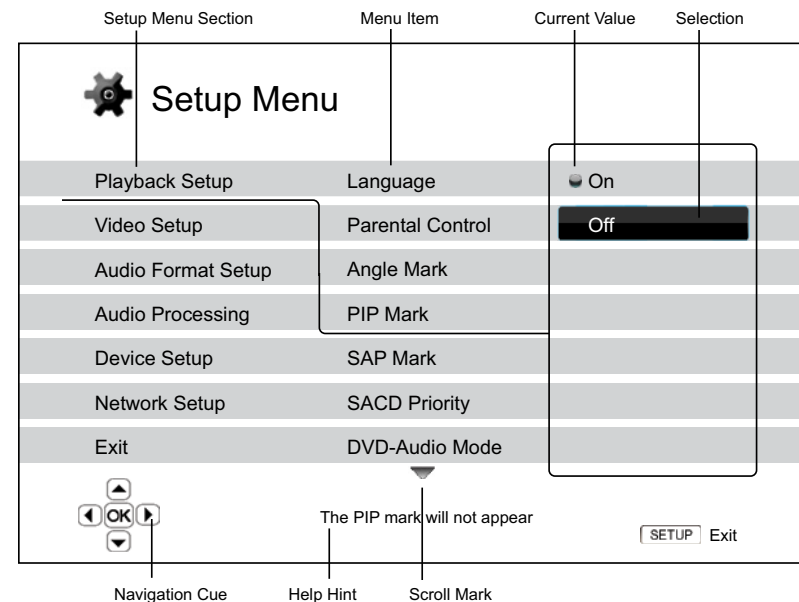
Note

*It is possible that some setup items are grayed-out and inaccessible. This can be caused by disc still being played back or interlocking with mutually exclusive setup items. Please stop playback or eject the disc before trying to change these setup items. If you still cannot access the setup item, please check for configuration conflicts and consistency. For example, if "**Video Setup** > **1080p24 Output**" is set to "**Off**", the "**DVD 24p Conversion**" menu item will be grayed-out. Setting "**1080p24 Output**" to "**On**" will enable the "**DVD 24p Conversion**" setting.*

To access the player's Setup Menu, simply press the **SETUP** button on the remote control. Since some Setup Menu options can become inaccessible when the player is playing a disc, it is

recommended that you operate the Setup Menu when playback is fully stopped or when there is no disc in the player.

1. Press the **SETUP** button on the remote control, and the TV screen displays the following:
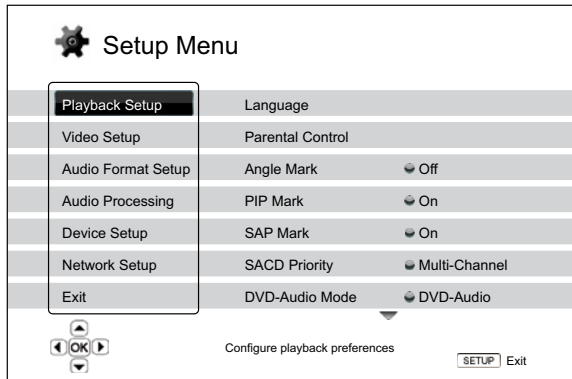
2. Press the **UP/DOWN ARROW** buttons to select the section. There are 6 sections: **Playback Setup**, **Video Setup**, **Audio Format Setup**, **Audio Processing**, **Device Setup**, and **Network Setup**. Press the **ENTER** button or the **RIGHT ARROW** button to enter the selected section.
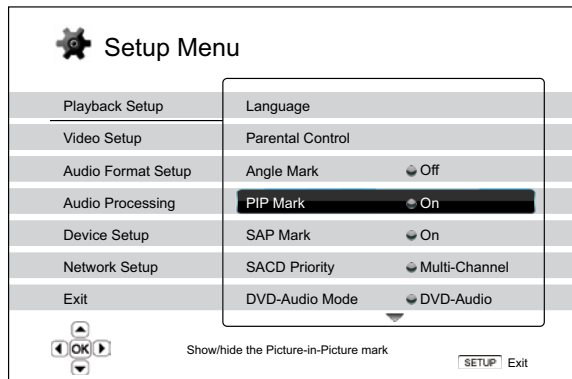
3. Press the **UP/DOWN ARROW** buttons to select the setup item to be changed, and press the **ENTER** or **RIGHT ARROW**

button to change the setting. When the scroll icon is shown at the top or bottom of the Setup Menu, it indicates that there are more menu items that can be accessed by scrolling with the **UP/DOWN ARROW** buttons.

> For example, in the **Playback Setup** section, you may use the **UP/DOWN ARROW** buttons to select the "**PIP Mark**" setup item, and press the **ENTER** button to change the "**PIP Mark**" setting.

4. To select a value from the list of available settings, press the **UP/DOWN ARROW** buttons and then press the **ENTER** button to confirm.

> For example, to select "**Off**" for "**PIP Mark**", use the **UP/DOWN ARROW** buttons to highlight the "**Off**" selection and press the **ENTER** button.
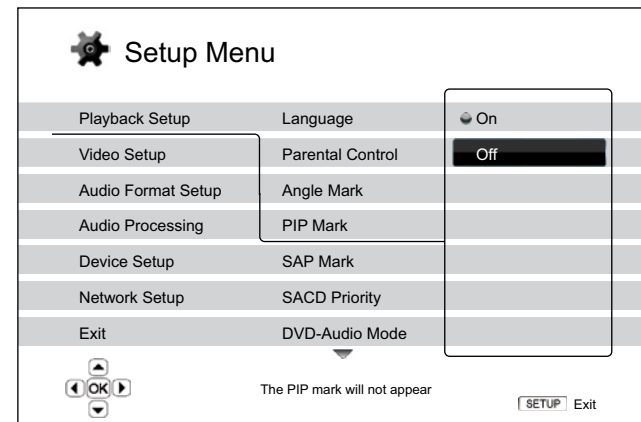
5. To exit the SETUP menu at any time, press the **SETUP** button on the remote control or select **Exit** from the Setup Menu sections.

Playback Setup

The "Playback Setup" section is designed to configure playback preferences for various contents. The setup items in this section are:
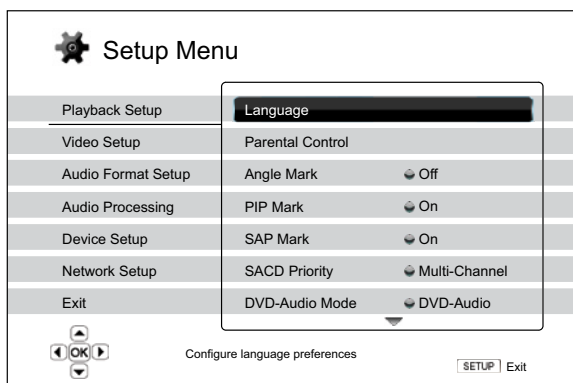
1. **Language**: To configure language preferences. The menu contains the following sub-items:

    - **Player Language** – To choose the display language for the player's Setup Menu and onscreen display. At this time only English is available.

    - **Disc Menu Language** – To choose the preferred language for displaying DVD and Blu-ray Disc menus. If a disc menu of the selected language is available, that menu will be shown instead of the default disc menu.

    - **Audio Language** – To choose the preferred audio language for DVD and Blu-ray Discs. If an audio track of the selected language is available on the disc, the audio track will be played back.

    - **Subtitle Language** – To choose the preferred subtitle language for DVD. If a subtitle of the selected language is available, it will be displayed. When "Auto" is selected, the subtitle display is decided by the disc.

Note

If your preferred language is not listed in the Audio, Subtitle or Disc Menu options, select "Other" and enter the Language Code found on page 77 of this manual.

2. **Parental Control**: To set parental control ratings in order to prevent minors from watching inappropriate content. This function depends on the disc being properly rated and encoded.

    - Press the **SELECT** button to bring up the rating selection menu.

    - To adjust the parental control settings, you must enter the current parental control password. If you have not set a parental control password yet, the default password is "0000".

    - The parental control menu contains the following sub-items:

        - **BD Ratings** Press the up/down **ARROW** buttons to select the rating allowed for Blu-ray Discs. "Off" means no ratings control and all discs are allowed to play. Numbers 1 to 21 corresponds to the age limit. Discs encoded with an age limit that is equal to or below the selected age will be allowed, and any rating above the selected age will be blocked.

        - **DVD Ratings** - Press the up/down **ARROW** buttons to select the rating to allow for DVD. The available ratings are Kid, G, PG, PG-13, PGR, R, NC17, Adult and Off. The selected rating and below will be allowed, and any rating above will be blocked. If "Off" is selected, all discs are allowed to play.

        - **Area Code** – Some Blu-ray Discs may have different parental control ratings for different geographical areas. At this time the player only supports the parental control ratings used in the United States.

        - **Change Password** – To change the parental control password, enter a 4-digit number as the new

password. Enter the new password again to confirm. If the two entries are matching, the new password replaces the old parental control password.

3. **Angle Mark (on/off)**: To turn on/off the display of an angle mark when a DVD or Blu-ray Disc with multiple available angles is played. Keeping the angle mark off avoids distraction from normal movie watching.

4. **PIP Mark (on/off)**: To turn on/off the display of a Picture-in-Picture mark when a Blu-ray Disc with secondary video is played. Keeping the PIP mark off avoids distraction from normal movie watching.

5. **SAP Mark (on/off)**: To turn on/off the display of a Secondary Audio Program mark when a Blu-ray Disc with secondary video and audio is played. Keeping the SAP mark off avoids distraction from normal movie watching.

6 **SACD Priority**: To select which audio layer to play for SACD (Super Audio CD). The options are:

- **Multi-Channel** – Play the multi-channel surround audio layer

- **Stereo** – Play the 2-channel stereo audio layer

- **CD Mode** – Play the CD layer of a hybrid SACD disc

7. **Auto Play Mode (on/off)**: To select whether the player shall start playing an audio CD or SACD automatically. When auto play mode is turn on, these discs will start playing upon insertion into the player. When auto play mode is turned off, the player will wait for the user to start playback by pressing the **PLAY** button.

8. **PBC** – Play Back Control: To enable/disable Play Back Control. Play Back Control is a primitive form of disc menu. The options are:

- **On** – If the disc contains Play Back Control, show the menu.

- **Off** – Play back the contents by sequence.

Video Setup

The "Video Setup" section of the Setup Menu system allows you to configure video output options. The menu items in this section are:
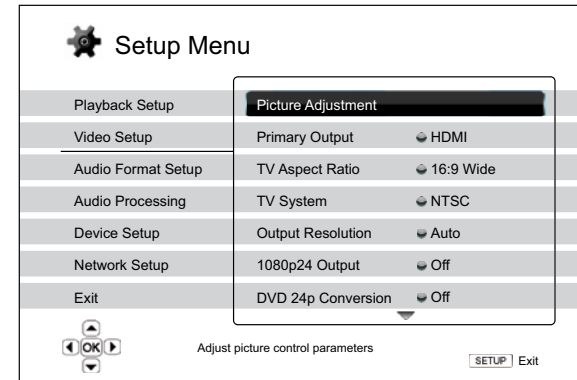
1. **Picture Adjustment**: To adjust picture control parameters. The Lexicon BD-30 Blu-ray Disc Player provides a wide array of picture controls. Please refer to the Picture Adjustment section on page 57 of this manual for details of each control.

2. **Primary Output**: To select the primary video output port. The options are:

- **HDMI** – Use HDMI as the primary video output port. This setting will ensure that the HDMI output gets the best possible picture quality. The VRS video processor will be used unless "Source Direct" output resolution is selected, in which case VRS video processing is bypassed. Component and composite video output may not be available or may be limited to a lower resolution based on content source limitations.

- **Component** – Use component video as the primary video output port. This setting will ensure that the component output will always be available and displays proper video signals. With this configuration, the video decoder in the

player performs any necessary format conversion. The VRS video processor is completely bypassed when using the component output.

Note
Copyright control mechanisms encoded on the disc may limit the output resolution of the component video output. For DVD, if CSS encryption is in use, the output resolution is limited to no more than 480p/576p; for Blu-ray Discs, the output resolution is limited to no more than 1080i, and could be lower if the disc contains the Image Constraint Token.

3. **TV Aspect Ratio**: To set the aspect ratio of the player's output image. The options are :

   • **4:3 Letterbox** – Choose this when the display is standard 4:3. A widescreen image is displayed in "letterbox" format with black borders on top and bottom.

   • **4:3 Pan & Scan** – Choose this when the display is standard 4:3. A widescreen image will be stretched.

   • **16:9 Wide** – Choose this when the display is widescreen 16:9. 16:9 materials will be displayed in its native aspect ratio, and 4:3 materials will be stretched horizontally.

   • **16:9 Wide/Auto** – Choose this when the display is widescreen 16:9. 16:9 materials will be displayed in its native aspect ratio, and 4:3 materials will be displayed with black borders on both sides in order to maintain the original 4:3 aspect ratio.

   For a detailed description on how to choose a proper TV Aspect Ratio, please refer to the *Determine the Display Aspect Ratio* section on page 24 of this manual.

4. **TV System**: To choose the output video system or broadcast standard (PAL/NTSC) to match the type of TV. The options are:

   • **NTSC (default)** – When playing NTSC-encoded discs, no system conversion is performed. PAL-encoded contents are converted to NTSC output. Blu-ray Discs encoded with 24Hz frame rate are converted to 60Hz frame rate if neither 1080p24 Output nor Source Direct output

resolution is enabled.

   • **PAL** – When playing PAL-encoded discs, no system conversion is performed. NTSC-encoded contents are converted to PAL output. Blu-ray Discs encoded with 24Hz frame rate are converted to 50Hz frame rate if neither 1080p24 Output nor Source Direct output resolution is enabled.

   • **Multi-system** – No system conversion is performed. The output video system is the same as that encoded on the disc. Blu-ray Discs encoded with 24Hz frame rate are converted to 60Hz frame rate if neither 1080p24 Output nor Source Direct output resolution is enabled. Requires a TV that supports both NTSC and PAL systems.

Note
Do not select "Multi-system" if your TV does not support both NTSC and PAL systems. The TV display may become a black screen upon inserting a disc encoded in a different system than your TV supports. Should this happen, you can press the OPEN button to eject the disc tray, and then use the Setup Menu to correct the "TV System" setting.

5. **Output Resolution**: To choose the output resolution that best matches your television's native resolution. For a detailed description on how to choose a proper output resolution, please refer to the Select the Best Output Resolution section on page 23 of this manual.

6. **1080p24 Output**: To set 1080p 24Hz output options. This option only applies to the HDMI output at 1080p resolution. Many Blu-ray Discs that originated from theatrical movies are encoded using 24Hz frame rate, the same number of frames per second as the original theatrical film. If the TV properly supports 1080p 24Hz, smoother motion can be achieved by enabling **1080p24 Output** for such discs. The available options are:

   • **Auto (default)** – Video encoded in 24Hz frame rate will be output as 1080p 24Hz if the TV informs the player that it can support the 1080p24 signal.

- **On** – Video encoded in 24Hz frame rate will be output as 1080p 24Hz without regard to whether the TV can support the 1080p24 signal or not. This is useful if the TV can actually support 1080p24 but does not properly state its capability. Please note that if the TV cannot support 1080p24, selecting this option will result in no video.

- **Off** – Video encoded in 24Hz frame rate will be converted to 60Hz (NTSC) or 50Hz (PAL).

7. **DVD 24p Conversion**: To set 24Hz frame rate conversion for DVD. This option only applies to the HDMI output and is available only when 1080p24 Output is enabled (set to Auto or On). Many DVDs that originated from theatrical movies are encoded using a method called "3:2 telecine" to convert the 24 frames per second film to 60Hz video signal. The player can convert the 60Hz video signal back to 24 frames per second and output as 1080p 24Hz. Smoother motion can be achieved by enabling this option, provided that the TV and the disc both meet the conditions for the conversion. The available options are:

- **On** – Convert DVD to 24Hz frame rate when possible.

- **Off** – Do not convert DVD to 24Hz frame rate.

Note
The result of DVD 24p Conversion depends heavily on the quality of the content. If the video encoded on the DVD contains incorrect 3:2 cadence, cadence breaks caused by edits, or heavy compression noise that can affect cadence detection, the result may have motion judder or frame tearing. Should this happen, you need to turn off DVD 24p Conversion and watch the DVD in its original frame rate.

8. **HDMI Options**: To configure video options that are unique to the HDMI output. This item contains a sub-menu with the following settings:

- **De-interlacing Mode** – To select the type of de-interlacing algorithm that the player should use to convert interlaced video on a DVD or Blu-ray Disc to progressive output. The Lexicon BD-30 utilizes the Precision De-interlacing™

technology from VRS™ (Video Reference Series) by Anchor Bay for its HDMI output. A proper de-interlacing mode will ensure the output video matches the original contents and is free of de-interlacing artifacts. The available options are:

- **Auto** – Source adaptive de-interlacing is on. This is the recommended setting as it sets the player to optimally process a variety of signal types.

- **Film Bias Mode** – The Film Bias Mode may improve film mode detection in some cases.

- **Video Mode** – Turn off film mode detection and treat all contents as video origin. Deinterlacing is done by weaving two video fields into a video frame. Use this setting if you are certain the disc is made from footage originally shot with a video camera, and not with a film camera.

- **2:2 Even** – This mode should be used when you know that the source is high-quality 2:2 pull-down (i.e., film-based content played back in a country with a 50Hz video standard) and you want to avoid any loss of cadence lock while watching that source. This mode weaves two adjacent fields together, starting with an even field and combining it with the following odd field. This will provide a higher quality overall signal than the 'Auto' or 'Film Bias Mode' settings, providing that the source really is a 2:2 pull-down and does not have bad edits.

- **2:2 Odd** – This mode is very similar to "2:2 Even" except that this weaves two adjacent fields together starting with an odd field and combining it with the following even field. Only one of the 2:2 de-interlacing settings is correct for any given source and the correct mode can be chosen by simply trying both of them and selecting the one which does not result in combing artifacts.

- **CUE-Correction** – To select whether the player should apply chroma filtering to remove Chroma Up-sampling

Errors (CUE) and Interlaced Chroma Problem (ICP). CUE is caused by improper decoding and de-interlacing of MPEG encoded video. The Lexicon BD-30 is free of the CUE problem. ICP is caused by the encoding process for interlaced video, so you may encounter it on some DVD and Blu-ray Discs. The CUE-Correction function can detect and filter out the errors. The available options are:

- **Auto (Recommended)** – Automatic chroma error detection and correction. Use this setting when you are not sure if the disc has chroma errors.

- **On** – Chroma filtering is always on. Use this setting if the disc is known to have chroma errors.

- **Off** – No chroma filtering is applied. Use this setting if the disc does not have chroma errors.

- **Color Space** – To select the color space for the HDMI output. The available options are:

  - **Auto (Recommended)** – The player checks with the display device to automatically determine what color space to use. If the display device supports YCbCr 4:4:4, then it will be used to avoid extra color space conversion.

  - **RGB Video Level** – The HDMI output uses RGB color space and normal signal range suitable for video displays.

  - **RGB PC Level** – The HDMI output uses RGB color space and expands the signal range. The expanded signal range is suitable for personal computer (PC) displays. Some TVs are designed to be used as a PC monitor, and expect signal in expanded RGB range when the DVI input is selected. For these displays if the video signal uses the normal RGB range, the black-white contrast will be reduced. You can set the player to use the RGB PC Level output and restore proper contrast.

- **YCbCr 4:4:4** – The HDMI output uses YCbCr 4:4:4 color space.

- **YCbCr 4:2:2** – The HDMI output uses YCbCr 4:2:2 color space. Generally this is the color space that is closest to the color space encoded on the discs. (All discs are encoded in YCbCr 4:2:0 color space, and the video decoder decodes it into YCbCr 4:2:2.)

- **HDMI Deep Color** – Deep Color is an OPTION for some TVs or projectors that feature HDMI v1.3 inputs. Normally, each pixel of the video image is transmitted using 24-bit data (8-bit per channel for R, G, B or Y, Cb, Cr). If Deep Color is supported, each pixel of the video image can be transmitted using 30-bit (10-bit per channel) or 36-bit (12-bit per channel) data. The increased bit depth should result in smoother color transitions and better gradients. The available options are:

  - **30 Bits** – Use the 30-bit per pixel Deep Color mode.

  - **36 Bits** – Use the 36-bit per pixel Deep Color mode.

  - **Off** – Do not use Deep Color.

Note

Since the Deep Color feature is OPTIONAL and may not be supported by all TVs, enabling Deep Color while connected to a TV without this feature may result in no effect or no video.

At this time, no disc is encoded with Deep Color. Enabling Deep Color will not magically make colors richer, but will help preserve the maximum precision as a result of video processing and picture control adjustment.

- **Demo Mode** – To enable a special split-screen demonstration mode. This is designed for the demonstration of VRS™ video processing technology. It can also be used as an aid for setting picture control adjustments for Detail Enhancement, Edge Enhancement and Noise Reduction. It should NOT be used for normal movie watching. The available options are:

- **On** – The video screen will be split in half. The left side demonstrates the result of the VRS™ video processing, and the right side shows video without the help of VRS video processing.
- **Off** – Normal viewing mode.
- **A/V Sync** – To add a delay to the HDMI audio output. If you experience an audio/video synchronization problem, you may use this option to add a slight delay to the audio so it is synchronized to the video.
- Use the **UP**/**DOWN ARROW** buttons to highlight the **A/V Sync** menu item. Press the **ENTER** button.
- Press the **LEFT**/**RIGHT ARROW** buttons to adjust delay. The audio delay can be adjusted in 10ms steps.
- Press the **ENTER** button to confirm the new **A/V Sync** setting and return to the Audio Processing Setup Menu.

9. **Screen Saver**: To turn on/off the screen saver function. The screen saver is designed to minimize burn-in concerns for plasma and CRT display devices. The available options are:

- **On** – After about 3 minutes of inactivity, the player will show an animated Lexicon logo moving on a black background. This allows most areas of the screen to rest and gives all areas an equal opportunity to refresh.
- **Off** – The screen saver will not be activated. Use this option if your TV does not have a burn-in issue.
- **Energy Saver** – Video output will be turned off after 3 minutes of inactivity. Many projectors and LCD TVs will go into a standby or sleep mode and turn off their projection lamp or LCD backlight lamp, thus saving energy and prolonging the lamp life. When you press any button on the Lexicon remote control or the player's front panel, the screen saver will be cancelled and video output will be restored. If your TV is already in standby or sleep mode, you may need to wake up the TV by pressing a button on its remote or control panel.

Picture Adjustment

Picture Adjustment is a special section of the Video Setup menu. It allows you to fine-tune many picture control parameters in order to achieve the optimal picture quality and visual result. To use Picture Adjustment, press the **SETUP** button on the remote control to enter the player's Setup Menu, and then choose "Video Setup" – "Picture Adjustment". The Setup Menu will be replaced by the Picture Adjustment menu:

Picture Mode	Normal		
Brightness	0	-16	+16
Contrast	0	-16	+16
Hue (Analog)	0	-16	+16
Saturation	0	-16	+16
Detail Enhancement	0	-16	+16
Edge Enhancement	0	-16	+16
Noise Reduction	0	0	+8
Y/C Delay	0	-16	+16
Border Level	0	0	+16
Exit			

To change a picture adjustment parameter, use the **UP**/**DOWN ARROW** buttons to highlight the parameter, and use the **LEFT**/**RIGHT ARROW** buttons to change its value.

To aid in the adjustment of picture control parameters, the picture adjustment menu will be reduced to only show the parameter being adjusted once you press the **LEFT**/**RIGHT ARROW** buttons. The reduced menu will be positioned near the bottom of the screen.

Brightness	0	-16	+16
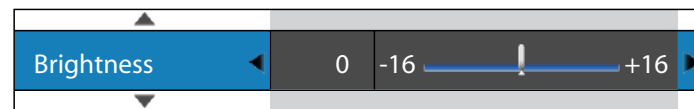
You can continue adjusting the current parameter by pressing the LEFT/RIGHT ARROW buttons. To select another parameter, press the UP/DOWN ARROW buttons. Press the ENTER button to return to the large Picture Adjustment menu.

To exit the Picture Adjustment menu and return to the Setup Menu, either select "Exit" or press the RETURN button.

The following picture adjustment controls are available:

1. **Brightness**: To adjust the brightness (black level) of the video output.

2. **Contrast**: To adjust the contrast (white level) of the video output.

Note
Proper brightness and contrast settings are necessary for a quality video output. If you do not have the correct black and white levels, your images can appear washed out or can lose detail in shadows when watching darker scenes. Televisions have brightness (black level) and contrast (white level) controls; however, it may require a combination of tweaking both the player and your television to get the optimal result. We recommend using a calibration disc such as Digital Video Essentials HD Basics as aids for adjusting. First adjust the television's picture controls for the best possible picture. Once that is done, try changing the player's settings to further refine the picture to the optimal result.

3. **Hue**: To adjust the hue (tint) of the video output. This control only applies to analog video output (component and composite).

4. **Saturation**: To adjust the saturation (color intensity level) of the video output.

5. **Detail Enhancement (Sharpness)**: To set the sharpness of video output. Detail enhancement level can be set between -16 and +16. The default is level 0. Level 0 turns off detail enhancement. The negative levels may be used to reduce or eliminate overly sharpened video; however, the picture may appear soft. The positive levels increase the enhancement. The higher the level, the sharper the video details are. However, too high a sharpness level may cause white line etching around objects. Detail Enhancement can be used together with Edge Enhancement to achieve an optimal result.

6. **Edge Enhancement (Edge-Qualified Sharpness)**: To set the sharpness of object edges in the video. Edge enhancement level can be set between -16 and +16. The default is level 0. Level 0 turns off edge enhancement. The negative levels reduce the sharpness of object edges. The positive levels sharpen object edges. Edge Enhancement can be used together with Detail Enhancement to achieve an optimal result.

Detail Enhancement and Edge Enhancement produce similar results, but there are subtle differences. Detail Enhancement works best when the source material is "clean" and free from noise. Edge Enhancement works well for less pristine sources. It produces a sharpening effect without making noise more visible.

It is also possible to adjust these two controls in different directions to achieve optimal results from certain "difficult" materials. You may use Detail Enhancement to bring up detail in the entire image but, if you find that object edges are over enhanced, you can apply negative Edge Enhancement to reduce the over-enhancement of the edges.

Sharpness (Detail/Edge Enhancement) is a video processing function that can produce a sharper-looking picture but at the same time may cause unwanted artifacts. The Lexicon BD-30 Blu-ray Disc Player utilizes the fine detail and edge enhancement technology from VRS™ (Video Reference Series) by Anchor Bay for its HDMI output. This technology provides fine control to achieve an optimal balance between enhancing sharpness and minimizing unwanted artifacts. If the source content is properly produced, we generally recommend leaving these controls at level 0.

7. **Noise Reduction**: To select whether the player shall apply video noise reduction processing. Noise reduction levels can be set between 0 and 8. The default is level 0, which turns off noise reduction. When set to a smaller positive level, the player adjusts the picture quality by reducing the "mosquito noise" (artifacts around the outlines of objects). When set to a high level between 6 and 8, the player also uses detail and edge enhancement controls to reduce "block noise" (mosaic-like patterns caused by video compression) and "film grain noise" (natural variation of picture intensity caused by film grain). Excessive noise reduction may cause a loss of details. We recommend using the noise reduction function only when you encounter poorly encoded or compressed video that has apparent noise artifacts.

8. **Y/C Delay**: To adjust the time difference between the Luminance (Y) and Chrominance (Pb/Pr or Cb/Cr) channels of the video signal. When there is a significant lag between the channels, the image will look "smeared" because the color component is not lining up properly to the black and white luminance component. Adjust the Y/C delay setting only when the TV or projector has a Y/C delay problem. For a display device that normally does not have Y/C alignment problems, keep the Y/C delay setting at its default level of 0. The Y/C delay setting applies to the HDMI output only.

9. **Border Level**: To set the brightness level of the border area when borders are inserted by the player to maintain correct aspect ratio. The default level is 0, which corresponds to total black. If you set it to a positive level, the bars gradually become lighter grey instead of black. This setting may be useful for users with Plasma or CRT TVs that are sensitive to "burn-in". A grey border setting allows the phosphor in the bar area to be moderately used, and can alleviate the burn-in problem. The Border Level setting only applies to the HDMI output, and only affects borders inserted by the player. If the borders are encoded in the original video, the border brightness level will not be affected by this setting.

Audio Format Setup

The "Audio Format Setup" section of the Setup Menu system allows you to configure preferences for audio output formats. The menu items in this section are:
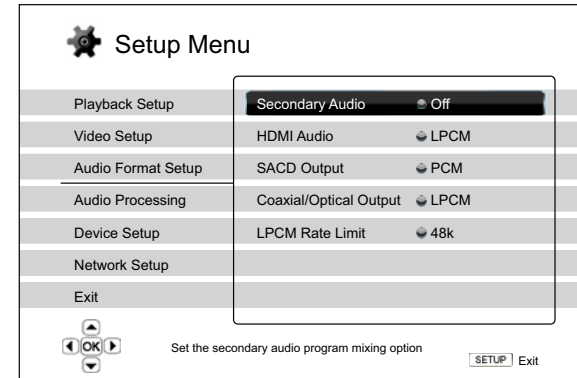
1. **Secondary Audio**: To set the Secondary Audio Program mixing option. Some Blu-ray Discs contain a secondary audio and video program, such as the director's commentary. Some Blu-ray Discs have a sound effect when you make menu choices. This Setup Menu item allows you to decide whether to mix the Secondary Audio Program and menu clicking sound into the primary audio. The options are:

   • **On** – The Secondary Audio Program and menu clicking sound are mixed into the primary audio. Usually this will cause the primary audio volume to be slightly reduced. High resolution primary audio will be converted to a normal resolution in order to mix with the secondary audio.

   • **Off** – The Secondary Audio Program and menu clicking sound are not mixed into the primary audio and you cannot hear the secondary audio or menu clicking sound. This setting preserves the highest possible audio quality for the primary audio.

2. **HDMI Audio**: To select digital audio output format from the HDMI port. The options are:

   - **LPCM** – Digital audio output via HDMI will be multi-channel Linear PCM format. When this option is selected, compressed audio bit streams will be decoded by the player. This setting is recommended when connecting the HDMI output directly to a TV or to a receiver without advanced audio decoding capabilities.

   - **Bitstream** – Digital audio output via HDMI will be in bitstream format. This option is recommended when connecting the HDMI output to an A/V receiver or processor that supports advanced audio decoding, such as Dolby TrueHD and DTS-HD Master Audio.

   - **Off** – No digital audio output via HDMI.

Note

If you use HDMI to connect audio to an HDMI A/V receiver or audio processor, it is important that you choose 720p or higher HDMI output resolution when playing high resolution audio content (SACD, Dolby TrueHD and DTS-HD Master Audio). According to the HDMI specification, the bandwidth available for audio is proportional to the total bandwidth used by video. At 480p/576p resolution, the HDMI specification can only support 2 channels of audio with high sample rate (up to 192kHz), or 8 channels of audio with standard sample rate (up to 48kHz). If you play high resolution audio content at the 480p/576p resolution, you may get reduced audio resolution, incomplete audio channels, or even no audio/video output at all. Choosing a higher output resolution such as 720p or above allows enough bandwidth for all high sample rate audio channels.

3. **SACD Output**: To select audio output format for SACD. The options are:

   - **PCM** – SACD Direct Stream Digital (DSD) data is converted into multi-channel, high resolution PCM data. The converted PCM data is then output through HDMI or the internal DAC (Digital to Analog Converter) for

the analog audio output ports. If you use a receiver that supports HDMI v1.1 to listen to SACD, please select this option. You may also want to select this option if you prefer the sound quality of the DSD-to-PCM conversion.

   - **DSD** – SACD DSD data is output over HDMI without any conversion. For the analog audio outputs, DSD data is converted into analog signal directly by the internal DAC. If you use a receiver that supports HDMI v1.2a with DSD over HDMI, or you prefer the sound quality of straight DSD to analog, please select this option.

4. **Coaxial/Optical Output**: To set the output format for the coaxial/optical digital audio output for use with Dolby Digital and DTS-compatible receivers. The options are:

   - **LPCM** – Forces down-mixed 2-channel digital audio output. Choose this setting if your receiver/amplifier only supports stereo digital (PCM) audio.

   - **Bitstream** – Passes audio as compressed bitstream format to the receiver/amplifier. Choose this setting if your receiver/amplifier is capable of decoding Dolby Digital and/or DTS.

5. **LPCM Rate Limit**: To set the maximum Linear PCM output frequency for the coaxial/optical digital output. This menu item is intended to ensure that the audio output is compatible with equipment that cannot support high sample rates. It sets an upper limit to decide whether the player shall down-sample audio. The player does not up-sample audio to higher sample rates. The options are:

   - **48K** – Supported by most equipment.

   - **96K** – Allows a higher sampling rate and frequency response. It can result in better audio quality. Ensure that the receiver/amplifier can support it.

   - **192K** – Allows the highest sampling rate and frequency response. It can result in the best audio quality. Ensure that the receiver/amplifier can support it.

Audio Signal Reference Chart

Blu-ray Discs may contain many types of audio signal formats; some of those are of the high resolution types such as Dolby TrueHD and DTS-HD Master Audio. Blu-ray Discs also have many optional audio components such as the Secondary Audio Program and menu clicking sound. The player's Audio Format Setup menu allows you to configure the audio output to meet your specific preference. The following chart provides a reference to what type of audio signal can be expected.

When "Secondary Audio" is set to "Off":

Output Ports	HDMI Output		Coaxial/Optical Output		Analog Multi-Channel Output
Setting Source Format	Bitstream	LPCM	Bitstream	LPCM	
LPCM 2ch	LPCM 2ch	LPCM 2ch	LPCM 2ch	LPCM 2ch	2ch
LPCM 5.1ch	LPCM 5.1ch	LPCM 5.1ch	LPCM 2ch	LPCM 2ch	5.1ch
LPCM 7.1ch	LPCM 7.1ch	LPCM 7.1ch	LPCM 2ch	LPCM 2ch	7.1ch
Dolby Digital	Dolby Digital	LPCM 5.1ch	Dolby Digital	LPCM 2ch	5.1ch
Dolby Digital Plus	Dolby Digital Plus	LPCM up to 7.1ch	Dolby Digital	LPCM 2ch	Up to 7.1ch
Dolby TrueHD	Dolby TrueHD	LPCM up to 192kHz 24-bit 7.1ch	Dolby Digital	LPCM 2ch	Up to 7.1ch
DTS	DTS	LPCM 5.1ch	DTS	LPCM 2ch	5.1ch
DTS-HD High Resolution	DTS-HD High Resolution	LPCM up to 7.1ch	DTS (core)	LPCM 2ch	Up to 7.1ch
DTS-HD Master Audio	DTS-HD Master Audio	LPCM up to 96kHz 24-bit 7.1ch or 192kHz 24-bit 2ch	DTS (core)	LPCM 2ch	Up to 7.1ch

When "Secondary Audio" is set to "On" and the player encounters a secondary audio track or menu clicking sound:

Output Ports	HDMI Output		Coaxial/Optical Output		Analog Multi-Channel Output
Setting Source Format	Bitstream	LPCM	Bitstream	LPCM	
LPCM 2ch	LPCM 2ch	LPCM 2ch	LPCM 2ch	LPCM 2ch	2ch
LPCM 5.1ch	LPCM 5.1ch	LPCM 5.1ch	LPCM 2ch	LPCM 2ch	5.1ch
LPCM 7.1ch	LPCM 7.1ch	LPCM 7.1ch	LPCM 2ch	LPCM 2ch	7.1ch
Dolby Digital	DTS*	LPCM 5.1ch	DTS*	LPCM 2ch	5.1ch
Dolby Digital Plus	DTS*	LPCM up to 7.1ch	DTS*	LPCM 2ch	Up to 7.1ch
Dolby TrueHD	DTS*	LPCM up to 192kHz 24-bit 7.1ch	DTS*	LPCM 2ch	Up to 7.1ch
DTS	DTS*	LPCM 5.1ch	DTS*	LPCM 2ch	5.1ch
DTS-HD High Resolution	DTS*	LPCM up to 7.1ch	DTS*	LPCM 2ch	Up to 7.1ch
DTS-HD Master Audio	DTS*	LPCM up to 96kHz 24-bit 7.1ch or 192kHz 24-bit 2ch	DTS*	LPCM 2ch	Up to 7.1ch

Note: All audio output signals are mixed with primary, second audio and menu clicking sound. DTS* denotes mixed audio re-encoded into DTS bitstream format.

Recommended Audio Format Options

Depending on your specific audio/video connection method, the audio format options of the Lexicon Blu-ray Disc Player may need to be adjusted to match your configuration. Please refer to the video and audio connection methods described previously in this guide and the following audio setup guidelines.

Audio Connection Directly to TV

If the player is connected directly to the TV through HDMI (as described in "Method 1" on page 13), through DVI and analog L/R audio cables (as described in "Method 2" on page 14), or through component video and analog L/R audio cables (as described in "Method 3" on page 15), it is recommended that you use the following audio format options:

Secondary Audio:	**On**
HDMI Audio:	**LPCM**
SACD Output:	**PCM**
Coaxial Optical Output:	(any – not in use)
LPCM Rate Limit:	(any – not in use)

Multi-Channel Digital Audio to Receiver or Processor through HDMI

If the player is connected to an A/V receiver or processor with HDMI inputs for high resolution multi-channel digital audio, you are in luck! You are now equipped to send all current audio formats to your receiver in pure digital form. This connection method will typically be as described in "Method 4" on page 16 of this guide.

To get the best possible audio via HDMI, you may need to set the following options on the player's audio format Setup Menu, depending on the capabilities of your HDMI-capable receiver:

- If your receiver supports HDMI v1.3 with decoding capability for high resolution lossless audio formats such as Dolby TrueHD and DTS-HD Master Audio, please set these audio format options:

Secondary Audio:	**Off** (or On if you need secondary audio)
HDMI Audio:	**Bitstream**
SACD Output:	**PCM** (or DSD if the receiver supports DSD over HDMI)
Coaxial OpticalOutput:	(any – not in use)
LPCM Rate Limit:	(any – not in use)

- If your receiver supports HDMI v1.1/1.2 Multi-Channel PCM audio, but not high resolution lossless audio formats such as Dolby TrueHD and DTS-HD Master Audio, please set these audio format options:

Secondary Audio:	**Off** (or On if you need secondary audio)
HDMI Audio:	**LPCM**
SACD Output:	**PCM** (or DSD if the receiver supports DSD over HDMI)
Coaxial Optical Output:	(any – not in use)
LPCM Rate Limit:	(any – not in use)

In this configuration you can enjoy all audio formats using the HDMI connection.

Multi-Channel Analog Audio to Receiver or Processor

If the player is connected to an A/V receiver through the 7.1ch or 5.1ch analog audio jacks using 8 or 6 RCA cables (as described in "Method 5" on page 17), you can play all supported audio formats and listen to them with your A/V receiver and surround sound systems. The following audio format setup options are recommended:

Secondary Audio:	**Off** (or On if you need secondary audio)
HDMI Audio:	**Off**
SACD Output:	**PCM or DSD** (depending on your listening preference)
Coaxial Optical Output:	(any – not in use)
LPCM Rate Limit:	(any – not in use)

Also set Speaker Configuration in the "Audio Processing" menu:

- Set **Down Mix** to "**7.1Ch**" or "**5.1Ch**".
- Set the speaker size and subwoofer properly according to your actual audio hardware (see page 63).
- Enable or select the multi-channel analog inputs on your receiver.

Coaxial or Optical Digital Audio to Receiver or Processor

If your audio connection is as described in "Method 6" on page 18 of this guide, and the A/V receiver supports Dolby Digital and DTS decoding, the following audio format setup options are recommended:

Secondary Audio:	**Off** (or On if you need secondary audio)
HDMI Audio:	**Off**
SACD Output:	(any – SACD is not available through the optical/coaxial output)
Coaxial Optical Output:	**Bitstream**
LPCM Rate Limit:	**48k** (or higher if supported by the receiver)

Stereo Analog Audio to Receiver

If you primarily listen to stereo contents or your receiver only offers stereo audio connections, please use the analog RCA-style cables to connect the dedicated Stereo Audio Out of the player to your

receiver, as described in "Method 7" on page 19 of this guide. The following audio format options are recommended:

Secondary Audio:	**Off** (or On if you need secondary audio)
HDMI Audio:	**Off**
SACD Output:	**PCM or DSD** (depending on your listening preference)
Coaxial Optical Output:	(any – not in use)
LPCM Rate Limit:	(any – not in use)

Audio Processing Setup

The "Audio Processing Setup" section of the Setup Menu system allows you to configure how the player will process audio signals before sending them to the output.
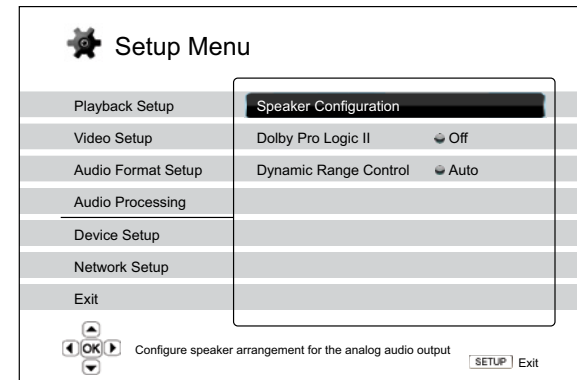
Speaker Configuration

In the **Speaker Configuration** menu you can configure speaker settings such as down-mix mode, number of speakers, their distance, size and trim level. The **Speaker Configuration** menu shows an illustration of the speaker placements to assist you on properly configuring the speaker parameters.

Upon entering this menu, the cursor is positioned on the front left speaker. You may use the **LEFT/RIGHT ARROW** buttons to

move the cursor. **The RIGHT ARROW** button moves the cursor in clockwise sequence, and the **LEFT ARROW** button moves the cursor in counterclockwise sequence. When the cursor is over the "Down Mix" or "Exit" options, you can also use the **UP/DOWN ARROW** button to highlight these options.

Note
Speaker Configuration *applies to the multi-channel analog audio outputs only. All digital bitstream and LPCM outputs are unaffected by these settings.*
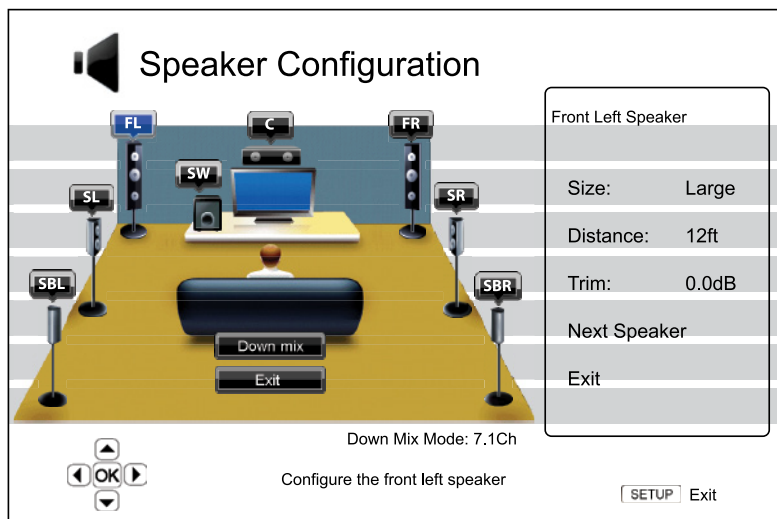
Down Mix Mode

Down mix is the process of converting multi-channel audio to a lesser number of channels. For example, converting a 5.1ch source to stereo or converting a 7.1ch source to 5.1ch. Down mixing allows the audio output from the player to match the exact number of speakers available in your home theater.

The current down mix mode is displayed in the lower right corner of the speaker placement illustration. To change the audio down mix setting, press the ENTER button while the cursor is over the "Down Mix" option. The following down mix modes are available:
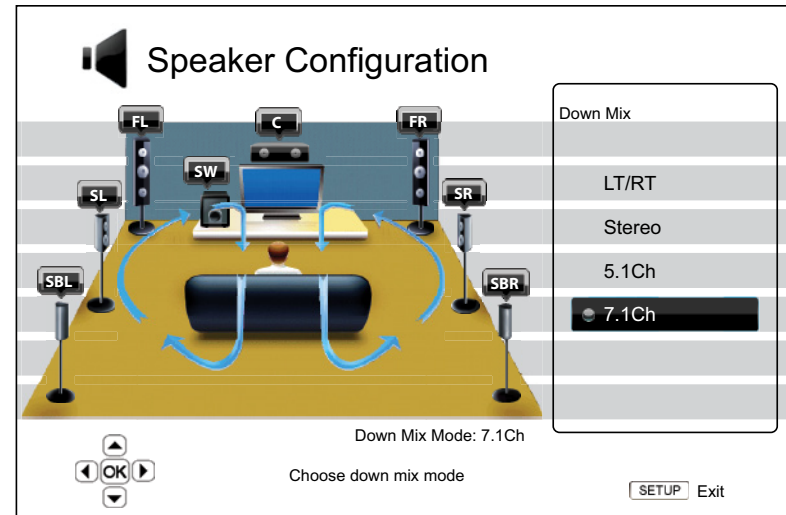
- **LT/RT** – Left Total/Right Total. The center and surround channels are mixed into the two front channels according to the LT/RT matrix. A Dolby Pro Logic receiver will decode the two-channel audio into surround audio.

- **Stereo** – This mode down-mixes multi-channel audio to 2-channel stereo output. For original stereo content the output will not change. For original multi-channel content the surround and center channels will be mixed with the left and right front channels. Recommended for use with TV sets or stereo receiver/amplifiers.

- **5.1Ch** – This mode enables 5.1ch decoded audio output. The number of actual output channels depends on the disc. If the source content has more channels, the surround back channels will be mixed into the surround channels.

- **7.1Ch** – This mode enables 7.1ch decoded audio output. The number of actual output channels depends on the disc. For 6.1ch contents, the left and right surround back speakers will both output the same surround back audio channel.

Speaker Settings

For each speaker in the home theater system, you can set its size, distance and trim level. To configure a speaker, move the cursor to highlight the speaker and press the ENTER button. The Speaker Settings menu on the right side of the screen will be activated. In the Speaker Settings menu, use the UP/DOWN ARROW buttons to select a parameter, and then press the ENTER button to change it. To exit the Speaker Settings menu and return to the Speaker Configuration illustration, press the LEFT ARROW button or select the "Exit" option. You can also move on to configure the next speaker by selecting the "Next Speaker" option.
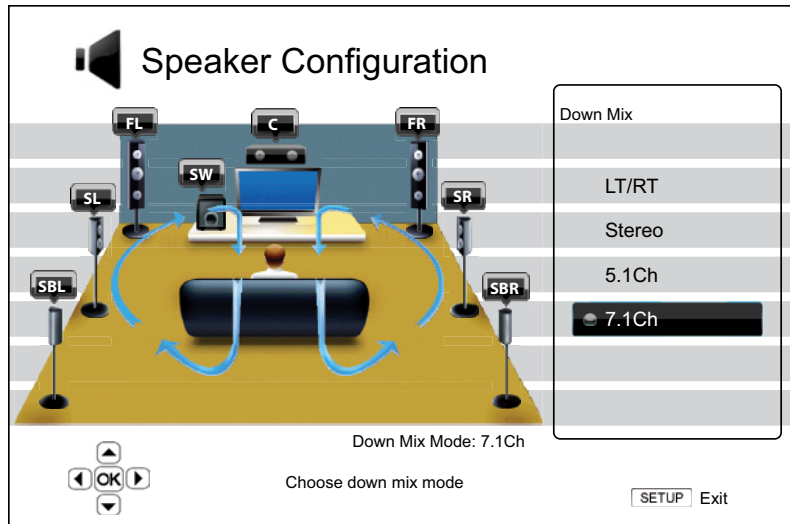
The following speaker parameters can be configured:

1. **Size:** The speaker size parameter sets bass filtering control for the speakers. The bass crossover frequency is fixed at 80Hz. The options are:

    - **Large** – Bass frequencies are passed to the speakers.

    - **Small** – Bass frequencies are not passed to the speakers to reduce possible distortion. If the subwoofer is available, bass frequencies are redirected to the subwoofer.

    - **On** (for subwoofer only) – Specify that a subwoofer is available.

    - **Off** – Speaker for the corresponding position does not exist. Audio for the missing speaker is redirected to other speakers or discarded if redirection is not possible.

Note

The front, surround and surround back speakers are configured as pairs. Changes to the size of one speaker will automatically change the other speaker of the pair.

2. **Distance:** The speaker distance parameter sets delay control for the corresponding audio channel. The delay is to compensate for the audio propagation time difference caused by the placement of speakers.

    Speaker distance compensation is not required if the A/V receiver or processor has the capability to adjust channel delay and compensate for speaker distance differences. However, if your receiver does not have such functions (most receivers do not offer these functions for their multi-channel analog input), you may adjust them through the player. Speaker distance delay is only applied if the player is decoding multi-channel audio. If you use bitstream audio output to your A/V receiver or processor, the bitstream audio is not adjusted for speaker distance delay.

    Since the delay is calculated based on the distance difference from each speaker to the listener's position, it is important to set the distance for the front speakers first and then the other speakers. Anytime you change the distance of the front speakers, the distance of the other speakers will be automatically adjusted to maintain the same distance difference.

Speaker Icons:

FL - Front Left
FR - Front Right
C - Center
SW - Subwoofer
SL - Surround Left
SR - Surround Right
SBL - Surround Back Left
SBR - Surround Back Right

Distances:

1 - Listener to Front
2 - Listener to Center
3 - Listener to Surround Left
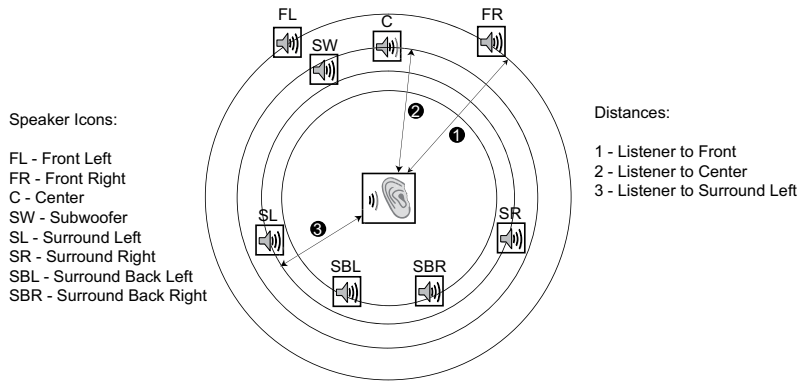
For example, in the above diagram, measure the distance (in feet) from the primary listening position to the Front Left or Front Right Speaker. Your Front Right and Left speakers should measure the same distance. If they do not, please adjust them if possible. Enter the distance of the Front Speakers (1 in the above picture) into the "Speaker Configuration" menu.

Next, measure the distance (in feet) from center speaker (2) to the listening position. Move the cursor to highlight the Center speaker in the Channel Delay setup page, and enter the distance (as close as possible) in feet. Repeat for each speaker in the system (Center, Left Surround, Right Surround, Left Surround Back, Right Surround Back and Subwoofer) as available. The player will insert appropriate delay to the center, subwoofer and surround channels to make sure sound waves from different speakers arrive at the listener at the same time.

Distance between the surround speakers and the listener must be shorter than or equal to that between the front speakers and the listener.

In case the channel delay settings cannot match your speaker configuration, please set all distances to the same and use your receiver/amplifier to set the channel delay.

Note
The front, surround and surround back speakers are configured as pairs. Changes to the distance of one speaker will automatically change the other speaker of the pair.

Example Channel Delay Adjustment:

Supported Configuration

Settings:

Front Speakers – 12ft
Center Speaker – 10ft
Subwoofer – 10ft
Left Surround – 9ft
Right Surround – 9ft
Left Surround Back – 8ft
Right Surround Back – 8ft

Unsupported Configuration

14ft

12ft   12ft

14ft

18ft   18ft

16ft   16ft

Settings:

Front Speakers – 12ft
Center Speaker – 12ft
Subwoofer – 12ft
Left Surround – 12ft
Right Surround – 12ft
Left Surround Back – 12ft
Right Surround Back – 12ft
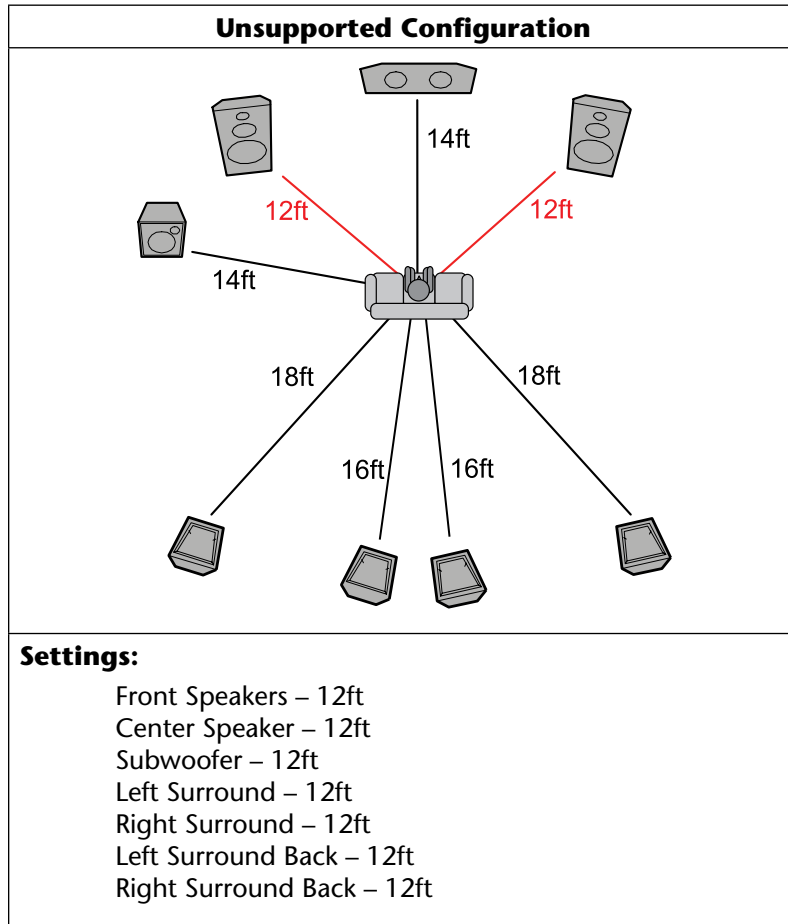
3. **Trim Level**: The speaker trim level parameter sets the volume of each individual channel. Channel trim is generally not required since most A/V receivers and processors have the capability to adjust channel trim and compensate for speaker sensitivity differences. However, if your receiver or processor does not have such functions (many receivers do not support

channel trim for their multi-channel analog inputs), you may adjust channel trim through the player. For most accurate results, it is recommended that you use test tones from a calibration disc, such as *Digital Video Essentials HD Basics*, and a SPL (Sound Pressure Level) meter. The trim level can be set to +/- 10dB in 0.5dB increments.

Other Audio Processing Settings

In addition to **Speaker Configuration**, two other audio processing settings are available:

1. **Dolby Pro Logic II**: Dolby Pro Logic II processing can expand 2-channel source audio into full 5-channel surround sound. Note: Pro Logic II functionality is effective only when **Speaker Configuration** > **Down Mix Mode** is set to "5.1Ch" or "7.1Ch". The available options are:

   • **Music** – The surround experience is tailored for multi-channel music playback.

   • **Movie** – Emphasis is given to the center channel as two-channel audio is decoded and played back into your 5.1 system.

   • **Off** – No Dolby Pro Logic II processing.

2. **Dynamic Range Control**: To set the Dynamic Range Compression (DRC). DRC can smooth out the sonic peaks and valleys common with wide-range digital audio. Enabling DRC may make low-level audio more audible during low-level listening. Turning off DRC restores the sonic energy present in the original recording. The available options are:

   • **Auto** – Play at the dynamic range specified by the disc. This option applies to Blu-ray Discs only. For other disc types no dynamic range compression is applied.

   • **On** – Turn on dynamic range compression.

   • **Off** – Turn off dynamic range compression.

Device Setup

The "Device Setup" section of the Setup Menu system allows you to configure additional player options related to the hardware and control functions. The menu items in this section are:

Setup Menu		
Playback Setup	Dimmer Control	On
Video Setup	OSD Mode	Normal
Audio Format Setup	Remote Control Code	Code 1
Audio Processing	HDMI CEC	On
Device Setup	Persistent Storage	
Network Setup	Reset Factory Defaults	
Exit	Firmware Information	

Dim front panel display

SETUP Exit
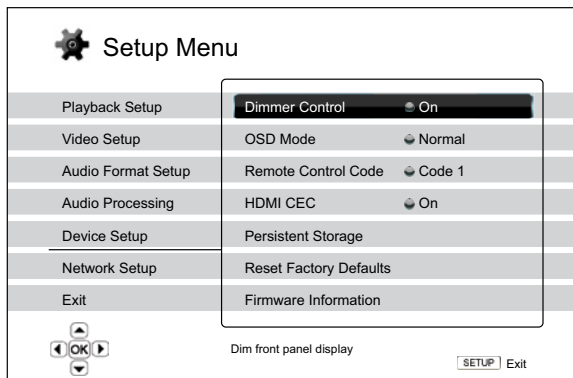
1. **Dimmer Control**: To control the display intensity of the front panel Vacuum Fluorescent Display (VFD) information window. In case you feel that the display becomes a distraction to your enjoyment of the video, this option allows you to dim it or turn it off. The available options are:

    - **On** – The VFD window is at normal brightness.

    - **Dim** – The VFD window is at reduced brightness.

    - **Off** – The VFD window is turned off. In this mode the display resumes momentarily when there is any user operation.

2. **OSD Mode**: To select how long the on-screen display information, such as elapsed or remaining time, stays on the TV screen. The available options are:

    - **Normal** – On-screen display information stays on the TV screen until the user cancels it.

    - **Silent** – On-screen display information shows on the TV screen for a few seconds and then disappears. The

front panel display still maintains the selected display information.

3. **Remote Control Code**: The Lexicon BD-30 Blu-ray Disc Player can respond to one of 4 sets of remote control codes. The default is "Code 1". If you have other products placed close to the BD-30, the other products may respond to the BD-30 that are causing interference, you can select a different remote code to avoid conflicts.

    If you have selected a new remote code, you must set the remote control handset to use the same code. Please refer to the Setting the Remote Code section on page 12 of this manual for details. If you have selected "Alt. Code", the supplied handset will not operate the player, and you must use a universal remote control with the properly configured code set.

4. **HDMI CEC**: To set HDMI Consumer Electronics Control (CEC) mode. CEC is an optional HDMI feature that enables convenient remote control and automatic setup of consumer electronics over the HDMI connection. The remote control function allows you to use a single remote handset to operate multiple devices connected via HDMI. For example, you may use the TV remote to control playback of the Blu-ray Disc Player. The automatic setup function can automatically turn on the TV and change to the proper input when you start playing a disc in the Blu-ray Disc Player. It can also turn off the player automatically when you turn off the TV. The implementation and compatibility of this feature varies by device manufacturer. Each may only implement part of the features or add their own proprietary functions. The manufacturer-specific implementation of the HDMI CEC function is often given a proprietary name of "…Link" or "…Sync". The Lexicon BD-30 Blu-ray Disc Player provides three modes for the HDMI CEC function:

    - **On** – HDMI CEC is enabled. Use this mode if your other devices are compatible with the player.

- **Limited** – HDMI CEC is enabled but the BD-30 will only respond to playback control commands. It will not respond or issue power on/off and input selection commands. Use this mode if you do not want the automatic setup function to turn on/off your devices.

- **Off** – HDMI CEC feature is turned off. The player will not respond to HDMI CEC commands from other devices, nor will it set up other devices automatically.

5. **Reset Factory Default**: To reset all settings to the factory default value. The remote control code, parental control password and ratings will not be reset. This operation is only available when the playback is completely stopped or when there is no disc loaded.

6. **Firmware Upgrade**: To upgrade the player's firmware. This operation is only available when the playback is completely stopped or when there is no disc loaded.

   The firmware is the system software that controls the features and functions of the player. Since the Blu-ray Disc specifications are new and evolving, it is possible that a Blu-ray disc manufactured after the player was manufactured uses certain new features of the Blu-ray Disc specifications. To ensure the best possible viewing experience, the player may need a firmware update from time to time. Please visit Lexicon's web site www.Lexicon.com to check for firmware updates and instructions on installing the updates.

   There are three ways to upgrade the player's firmware. The options are:

   - **Via Disc** – You may request a firmware upgrade disc or download a disc image from Lexicon's web site and burn an upgrade disc. Please follow the instructions that come with the upgrade disc.

   - **Via USB** – You may download the firmware files from Lexicon's web site to a USB drive and then use the USB drive to upgrade the player. Please follow the instructions on the firmware download web page.

   - **Via Network** – If the player has a working Internet connection (see page 20 and 70), you may upgrade the player directly over the Internet. Please follow the instructions on your TV screen.

7. **Firmware Information**: To display the currently installed firmware version.

8. **Persistent Storage**: To manage the persistent storage for BD-Video contents. The persistent storage is a data storage area that holds additional contents for BonusView and BD-Live features. The data will be kept even if you turn off the player. The following persistent storage management options are available:

   - **Storage Device** – To select which storage device should be used as the persistent storage. The Lexicon BD-30 is equipped with 1GB of internal flash memory. There are two USB ports on the player that can accept a USB drive to be used as the persistent storage. The choices are:

     - **Internal Flash** – Use the internal flash memory for persistent storage.

     - **USB Drive** – Use a USB drive for persistent storage. To meet the specification for BD-Live, a USB drive of 1GB or larger is required. A USB hard disk is not recommended.

Note
The new storage device choice becomes effective only after the player is restarted. Please make sure that you turn off the player and then turn it back on after changing the "Storage Device" option.

- **Total Space** – To display the total space of the persistent storage.
- **Available Space** – To display the currently available space of the persistent storage. If the available space becomes too low, some Blu-ray Discs may not play properly.
- **Erase BD-Video Data** – To erase the BD-Video data from the persistent storage.

Network Setup

The "Network Setup" section of the Setup Menu system allows you to configure the parameters for the Internet connection of the player, test the connection and restrict BD-Live access. The menu items in this section are:

```
         ⚙ Setup Menu

  Playback Setup      Dimmer Control        ◉ On
  Video Setup         OSD Mode              ◡ Normal
  Audio Format Setup  Remote Control Code   ◡ Code 1
  Audio Processing    HDMI CEC              ◉ On
  Device Setup        Persistent Storage
  Network Setup       Reset Factory Defaults
  Exit                Firmware Information

     ▲
  ◀ OK ▶              Dim front panel display
     ▼                                  SETUP  Exit
```
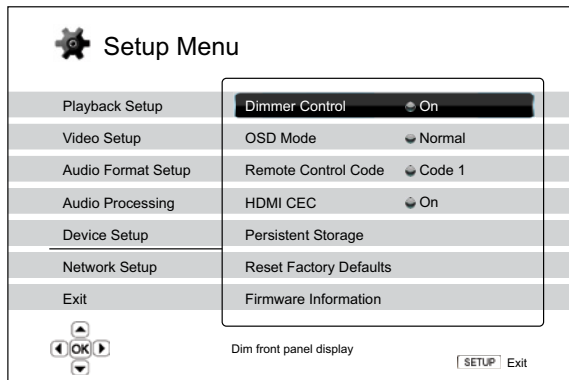
1. **IP Configuration**: To determine how the player obtains its IP address. The available options are:

    - **Auto (DHCP)** – The player automatically obtains its IP address information using DHCP (Dynamic Host Configuration Protocol). This is the default setting. In most cases, automatic IP configuration can be used.

- **Manual** – Manually enter the numeric IP address information. Set the IP configuration manually only when the router has no DHCP server functions or when the router's DHCP server function is disabled. For more information on how to manually configure the Internet connection and what values to use, please consult your broadband router/modem instruction manuals or call your Internet service provider.

2. **IP Address**: The Internet Protocol address of the player. When "IP Configuration" is set to "Auto (DHCP)", the value displayed here is obtained using DHCP and cannot be changed.

3. **Subnet Mask**: Each IP address has an associated subnet mask. It is used by the player to decide whether to route network traffic through the router or directly to another device on the same network. When "IP Configuration" is set to "Auto (DHCP)", the value displayed here is obtained using DHCP and cannot be changed.

4. **Gateway**: The IP address of the router. It is also called "default gateway" or "default router". When "IP Configuration" is set to "Auto (DHCP)", the value displayed here is obtained using DHCP and cannot be changed.

5. **DNS 1**: The IP address of the first (primary) DNS (Domain Name System) server. DNS is the mechanism to translate human-readable addresses (such as www.Lexicon.com) to numeric IP addresses. When "IP Configuration" is set to "Auto (DHCP)", the value displayed here is obtained using DHCP and cannot be changed.

6. **DNS 2**: The IP address of the second (secondary) DNS server. When "IP Configuration" is set to "Auto (DHCP)", the value displayed here is obtained using DHCP and cannot be changed.

7. **BD-Live Network Access**: To restrict BD-Live content access. The available options are:

    - **On** – BD-Live access is permitted.

- **Limited** – BD-Live access is permitted only for contents that have a valid content owner certificate. Internet access is prohibited if the BD-Live contents do not have a certificate. This option ensures that you are accessing only authentic content, although it may block your access to smaller independent content providers.

- **Off** – BD-Live access is prohibited.

8. **Connection Test**: To test the Internet connection. It is recommended that you test the connection when you initially connect the player to the Internet, or whenever changes to "IP Configuration" and other network parameters are made.

9. **MAC Address**: This read-only field displays the MAC (Media Access Control) address of the player. Each player has a unique MAC address. It is used by networking devices (such as a router or PC) on the same network to provide identification and facilitate communication.

7

References

Useful Notes

- In order to prolong the service life of your player, it is recommended to wait at least 30 seconds before you turn it on again after switching it off.
- Remove disc and turn power off after operation.
- Some functions of the player may not be applicable to certain discs.
- Some discs with special features may not be fully supported by the player. This is not a malfunction of the unit.
- In case of player malfunction, please turn it off, wait for 30 seconds and turn it back on. If the problem still exists, please follow the troubleshooting instructions or contact a Lexicon service center.

Troubleshooting

Use this chart to resolve general operational problems. If there are any problems that you cannot resolve, please contact your Lexicon service center.

Symptom	Possible Cause	Solution	Reference Page
No sound	Audio cable is not properly connected	Check audio cable, and then reconnect if necessary.	13 - 19
	Mute is activated	Press the MUTE button to cancel the mute.	30
	Volume is too low	Press the VOL + button to increase the volume to 100.	30
	SACD is played and the audio connection is coaxial or optical digital audio	This is not supported due to copyright restrictions of SACD. Please use the analog or HDMI audio output. Alternatively, you may set SACD Priority to CD mode and the player will play the CD layer.	18, 53
	DVD-Audio is played and the audio connection is coaxial or optical digital audio	This is not supported due to copyright restrictions of SACD. Please use the analog or HDMI audio output. Alternatively, you may switch to the DVD-Video playback mode.	18, 53
No picture	Video cable is not properly connected	Check video cable; reconnect if necessary.	13 - 14
	TV input is not correctly selected	Select the input to which the player is connected.	
	"Pure" mode engaged	Check the "PURE" display on the front panel, and press the PURE button to cancel this mode.	44
	Video output format is not support by the TV	Select a proper output resolution that is supported by your TV.	35
	Video system is not supported by the TV	When playback is completely stopped, press the P/N button or set the correct TV System in the Setup Menu.	35, 54

No color	Video system is not supported by the TV	When playback is completely stopped, press the P/N button or set the correct TV System in the Setup Menu.	35, 54
	Saturation set too low	Check the saturation setting on TV and player.	58
	Loose or damaged component video cables	If using component output, check that the three cables are all properly plugged in and not damaged. Make sure the color of the plugs match the jacks on both ends.	15
	Incorrect video output port	If using composite video output, check that the cable is not incorrectly plugged into a component video jack.	13
Incorrect color	Incorrect color space setting	If using HDMI for video output, check the color space setting on the TV and player.	53
	Incorrect component video cable connection	If using component video output, check the three component video cables to make sure the signals match on both ends.	15
Picture rolling or split picture	Video system is not supported by the TV	When playback is completely stopped, press the P/N button or set the correct TV System in the Setup Menu.	35, 54
"No Disc" or "Unknown Disc" error	No disc or incompatible disc loaded in player	Eject disc and check.	28
	Dirty disc recording surface	Eject the disc and clean any dirt or fingerprints.	4
	Disc not properly loaded	Eject disc and make sure the label side is facing up and the record side is facing down.	28
	Condensation on the Laser pick-up head	Turn on the player, eject the disc and leave the player on for about an hour.	3
Remote control failure	Remote control is out of range	Use the remote control within the effective range.	11
	Low battery	Replace the batteries.	11
	Incorrect remote control code	Make sure that no disc is playing. Aim the remote at the player; press and hold the ENTER button on the remote for 5 seconds to set the remote code.	12
Temporary function failure	Scratched or damaged disc is used	Replace the disc.	28
	Some functions are not available during playback	Stop playback completely, then try again.	28
	Interference from other devices	Identify interference by turning off other devices, and then relocate or replace the offending device.	3
Some Setup Menu items are grayed out	Some setup options cannot be changed while a disc is playing. Some setup options may be mutually exclusive with other setup options.	Fully stop playback, eject the disc and try the Setup Menu again.	22

Specifications

Designs and specifications are subject to change without notice.

Disc Types*	BD-Video, DVD-Video, AVCHD, SACD, CD, HDCD, Kodak Picture CD CD-R/RW, DVD±R/RW, DVD±R DL, BD-R/RE
BD Profile	BD-ROM Version 2 Profile 2 (also compatible with Profile 1 Version 1.0 and 1.1)
Internal Storage	1GB (Actual available storage varies due to system usage)
Output	Analog Audio: 7.1ch or 5.1ch, stereo
	Digital Audio: Coaxial, Optical
	HDMI Audio: Stereo, up to 7.1ch high-resolution PCM, up to 5.1ch DSD, bitstream or LPCM conversion of Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS, DTSHD
	High Resolution Audio, and DTS-HD Master Audio.
	Analog Video: Composite, Component Video (Y/Pb/Pr, 480i/480p, 720p/1080i available for non-restricted content only)
	Digital Video: HDMI with HDCP (NTSC: 480i/480p/720p/1080i/1080p/1080p24, PAL 576i/576p/720p/1080i/1080p/1080p24)
Video Characteristics	Composite Video Amplitude: 1.0Vp-p (75Ω)
	Component Video: Y: 1.0Vp-p (75Ω), Pb/Pr: 0.7Vp-p (75Ω)
Audio Characteristics**	Frequency: 20Hz – 20kHz (±0.4dB)
	Signal-to-Noise Ratio: >110dB
	Total Harmonic Distortion: < 0.001%
General Specification	Power Supply: ~ 100V – 240V, 50/60Hz AC
	Power Consumption: 35W (0.5W Standby)
	Dimensions: ~~430mm x 336mm x 77mm, 16 x 13¼ x 3 inches~~
	Mass: ~~5.1kg / 11.2 lbs~~
Operating Temperature	5°C - 35°C
	41°F - 95°F
Operating Humidity	15% - 75%
	No condensation

* Compatibility with user-encoded contents or user-created discs is on a best-effort basis with no guarantee due to the variation of media, software and techniques used.

**Nominal specification.

Language Code List

Code	Language Name
6565	Afar
6566	Abkhazian
6570	Afrikaans
6577	Ameharic
6582	Arabic
6583	Assamese
6588	Aymara
6590	Azerbaijani
6665	Bashkir
6669	Byelorussian
6671	Bulgarian
6672	Bihari
6678	Bengali, Bangla
6679	Tibetan
6682	Breton
6765	Catalan
6779	Corsican
6783	Czech
6789	Welsh
6865	Danish
6869	German
6890	Bhutani
6976	Greek
6978	English
6979	Esperanto
6983	Spanish
6984	Estonian
6985	Basque
7065	Persian
7073	Finnish
7074	Fiji

Code	Language Name
7079	Faroese
7082	French
7089	Frisian
7165	Irish
7168	Scots Gaelic
7176	Galician
7178	Guarani
7185	Gujarati
7265	Hausa
7273	Hindi
7282	Croatian
7285	Hungarian
7289	Armenian
7365	Interlingua
7378	Indonesian
7383	Icelandic
7384	Italian
7387	Hebrew
7465	Japanese
7473	Yiddish
7487	Javanese
7565	Georgian
7575	Kazakh
7576	Greenlandic
7577	Cambodian
7578	Kannada
7579	Korean
7583	Kashmiri
7585	Kurdish
7589	Kirghiz
7665	Latin

Code	Language Name
7678	Lingala
7679	Laothian
7684	Lithuanian
7686	Latvian,Lettish
7771	Malagasy
7773	Maori
7775	Macedonian
7776	Malayalam
7778	Mongolian
7779	Moldavian
7782	Marathi
7783	Malay
7784	Maltese
7789	Burmese
7865	Nauru
7869	Nepali
7876	Dutch
7879	Norwegian
7982	Oriya
8065	Panjabi
8076	Polish
8083	Pashto, Pushto
8084	Portuguese
8185	Quechua
8277	Rhaeto-Romance
8279	Romanian
8285	Russian
8365	Sanskrit
8368	Sindhi
8372	Serbo-Croatian
8373	Singhalese

Code	Language Name
8375	Slovak
8376	Slovenian
8377	Samoan
8378	Shona
8379	Somali
8381	Albanian
8382	Serbian
8385	Sundanese
8386	Swedish
8387	Swahili
8465	Tamil
8469	Telugu
8471	Tajik
8472	Thai
8473	Tigrinya
8475	Turkmen
8476	Tagalog
8479	Tonga
8482	Turkish
8484	Tatar
8487	Twi
8575	Ukrainian
8582	Urdu
8590	Uzbek
8673	Vietnamese
8679	Volapuk
8779	Wolof
8872	Xhosa
8979	Yoruba
9072	Chinese
9085	Zulu

Firmware Updates

For firmware updates, go to the following site:

http://www.Lexicon.com/products/downloads/BD30/upg/

8

Appendix

Lexicon BD-30 Blu-ray Disc Player RS-232 Control Protocol

~~The Lexicon BD-30 Blu-ray Disc Player can be ordered with an RS-232 option for wired remote control.~~ The RS-232C port is configured as a DCE device using a female 9-pin D-Sub type connector.

RS-232 Pin Configuration:

The pin out of the BD-30 RS-232C port is as follows:

Pin	Signal
2	TXD
3	RXD
5	GND

This pin configuration allows a PC running a serial terminal program (such as Hyper Terminal) to communicate with the player using a straight-through DB9 9-pin RS-232 serial cable. Do NOT use a "Null-Modem" type cable for PC connection. For connection to a remote control system, please refer to the documentation that comes with the remote control system.

Communication Settings:

The RS-232 control port of the Lexicon BD-30 uses the following communications settings:

Baud Rate: 9600

Data Bits: 8

Parity: None

Stop Bit: 1

Flow Control: None

Command Structure:

Each command starts with a # sign (ASCII 0x23), followed by a 3-character command code. If there are any parameters for the command, the parameters are given in text format, separated by a space (ASCII 0x20) from the command code. The # character (ASCII 0x23) must never appear in the parameters. A carriage return (ASCII 0x0d) indicates the end of the command. Each command must not exceed 25 bytes including the start of command and end of command bytes.

The illustration of the command structure is as follows:

<Command> = <Start of Command><CommandCode> [<sp><Parameters>]<End of Command>

<Start of Command> = #, ASCII 0x23

<Command Code> = <byte><byte><byte>

<sp> = space, ASCII 0x20

<Parameters> = command-specific

<End of Command> = CR, ASCII 0x0d

Response Structure:

Upon receiving a command, the player shall try to execute the command and send back a response. The response starts with an "@" sign (ASCII 0x23), followed by a result code, either "OK" or "ER". If there are any parameters or additional message, the parameters or message is given in text format, separated by a space (ASCII 0x20) from the result code. The @ character (ASCII 0x40) must never appear in the parameters or message. A carriage return (ASCII 0x0d) indicates the end of response. Each response must not exceed 25 bytes including the start of response and the end of response bytes.

The illustration of the response structure is as follows:

<Response> = <Start of Response><Result Code>
[<sp><Parameters>]<End of Response>

<Start of Response> = @, ASCII 0x40

<Result Code> = OK|ER

<sp> = space, ASCII 0x20

<Parameters> = command-specific

<End of Response> = CR, ASCII 0x0d

Command Sequence:

Commands are executed in the order they are received. The host should wait for a response from the player before sending the next command.

If the player receives a new command before executing the previous command, the player may discard the previous command.

If the host does not receive a response from the player 10 seconds after the command is issued, the host may consider the command or response lost during transmission, and can retransmit the command.

Command List:

A. Command that maps to a remote control button

This group of commands maps directly to the infrared remote control keys. No parameters are needed for these commands. The player handles the commands as if it receives the same IR remote commands. For actions that require multiple key sequence, such as go to a certain chapter (GOT command followed by multiple numeric key commands and the SEL command), the player responds to each command individually until the last command is received. At that time the player shall respond with either OK or ER depending on the result of the action.

Code	Remote Key	Function	Special Response
POW	POWER	Toggle power STANDBY and ON	OK ON OK OFF
SRC	SOURCE	Go to Home Menuto select media source	
EJT	OPEN	Open/close the disc tray	OK OPEN OK CLOSE
PON	ON	Discrete on	OK ON
POF	OFF	Discrete off	OK OFF
SYS	P/N	Switch output TV system: NSTC, PAL or MULTI(AUTO)	OK NTSC OK PAL OK AUTO
DIM	DIMMER	Dim front panel display	OK ON OK DIM OK OFF
PUR	PURE AUDIO	Pure audio mode (no video)	OK ON OK OFF
VUP	VOL +	Increase volume	OK n (n is the volume number, 0 – 100)
VDN	VOL -	Decrease volume	OK n (n is the volume number, 0 – 100)
MUT	MUTE	Mute audio	OK MUTE OK UNMUTE
NU1	1	Numeric key 1	
NU2	2	Numeric key 2	

Code	Remote Key	Function	Special Response
NU3	3	Numeric key 3	
NU4	4	Numeric key 4	
NU5	5	Numeric key 5	
NU6	6	Numeric key 6	
NU7	7	Numeric key 7	
NU8	8	Numeric key 8	
NU9	9	Numeric key 9	
NU0	0	Numeric key 0	
CLR	CLEAR	Clear numeric input	
GOT	GOTO	Play from a specified location	
HOM	HOME	Go to Home Menu to select media source	
PUP	PAGE UP	Show previous page	
PDN	PAGE DOWN	Show next page	
OSD	DISPLAY	Show/hide on-screen display	
TTL	TOP MENU	Show BD top menu or DVD title menu	
MNU	POP-UP MENU	Show BD pop-up menu or DVD menu	
NUP	Up Arrow	Navigation	
NLT	Left Arrow	Navigation	
NRT	Right Arrow	Navigation	
NDN	Down Arrow	Navigation	
SEL	ENTER	Navigation	
SET	SETUP	Enter the player setup menu	
RET	RETURN	Return to the previous menu or mode	
RED	RED	Function varies by content	
GRN	GREEN	Function varies by content	
BLU	BLUE	Function varies by content	
YLW	YELLOW	Function varies by content	
STP	STOP	Stop playback	

Code	Remote Key	Function	Special Response
PLA	PLAY	Start playback	
PAU	PAUSE	Pause playback	
PRE	PREV	Skip to previous	
REV	REV	Fast reverse play	OK 1 X OK 2 X OK 3 X OK 4 X OK 5 X
FWD	FWD	Fast forward play	Same as above
NXT	NEXT	Skip to next	
AUD	AUDIO	Change audio language or channel	OK (audio track information)
SUB	SUBTITLE	Change subtitle language	OK (subtitle information)
ANG	ANGLE	Change camera angle	OK (angle information)
ZOM	ZOOM	Zoom in/out and adjust aspect ratio	OK (zoom ratio)
SAP	SAP	Turn on/off Secondary Audio Program	OK (audio track information) OK OFF
ATB	AB REPLAY	Repeat play the selected section	OK A- OK A-B OK OFF
RPT	REPEAT	Repeat play	OK Repeat Chapter OK Repeat Title OK OFF
PIP	PIP	Show/hide Picture-in-Picture	
HDM	RESOLUTION	Switch output resolution	

B. Query Commands

This group of commands issues queries to the player. The player shall respond according to its current status.

Command Code	Function	Response Example
QPW	Query power status	OK ON OK OFF
QVR	Query firmware version	OK BD30-14-0306
QVL	Query volume	OK 100 OK MUTE
QHD	Query HDMI resolution	OK 480P OK 720P50 OK 1080P60
QPL	Query playback status	OK NO DISC OK LOADING OK OPEN OK CLOSE OK PLAY OK PAUSE OK STOP OK STEP OK FREV OK FFWD OK SFWD OK SREV OK SETUP OK HOME MENU OK MEDIA CENTER
QTK	Query Track/Title	OK 2/10
QCH	Query Chapter	OK 3/3
QTE	Query Track/Title elapsed time	OK 0:1:34
QTR	Query Track/Title remaining time	OK 1:20:23
QCE	Query Chapter elapsed time	OK 0:1:34

Command Code	Function	Response Example
QCR	Query Chapter remaining time	OK 0:12:22
QEL	Query Total elapsed time	OK 0:5:12
QRE	Query Total remaining time	OK 1:34:44
QDT	Query disc type	OK BD-MV OK DVD-VIDEO OK DVD-AUDIO OK SACD OK CDDA OK HDCD OK DATA-DISC
QAT	Query audio type	OK DD 1/1 OK DD 1/5 English OK DTS 2/5 English OK LPCM OK DTS-HD 1/4 English
QST	Query subtitle type	OK OFF OK 1/1 English

C. Advanced Commands

This group of commands instructs the player to perform an action in a single step.

Command Code	Parameters	Function	Possible Response
SHD	SDI SDP 720P 1080I 1080P SRC AUTO	Set HDMI output resolution. SDI – Standard definition interlaced (480i/576i) SDP – Standard definition progressive (480p/576p) SRC – Source Direct	OK 480P (OK followed by the original parameter)
SPN	NTSC PAL AUTO	Set output TV system	OK NTSC OK PAL OK AUTO
SZM	1 AR FS US 1.2 1.3 1.5 2 1/2 3 4 1/3 1/4	Set zoom ratio. AR – Aspect ratio correction (Stretch, Letterbox or Pillarbox) FS - Full Screen US – Underscan For HDMI Output: 1, AR, FS, US, 1.2, 1.3, 1.5, 2, 1/2; For Component Ouput: 1, 2, 3, 4, 1/2, 1/3, 1/4)	OK 1.2 (OK followed by the original parameter)
SVL	0 – 100 MUTE	Set volume control	OK 100 OK MUTE
SRP	CH TT ALL OFF SHF RND	Repeat chapter Repeat title Repeat all Repeat off Shuffle Random	OK CH (OK followed by the original parameter) ER INVALID
SRH	T3 C10 C 0:00:34 T 0:12:13 0:12:13	Search to Title 3 Search to Chapter 10 Search to 0:00:34 of the current chapter or track Search to 0:12:13 of the current title or disc Search to 0:12:13 of the current title or disc	OK ER INVALID
DPL		Direct play	OK

RST		Reset RS232 Command – Clean all command buffers, do not wait for any pending/executing commands. Start over again.	OK

Example:

The following is an example of a command and response sequence. The comments are placed after the semicolon.

#PON	; Turn on power
@OK ON	; Player is turned on
#QPW	; Check power status
@OK OFF	; Player is still doing power-on initialization (Wait for awhile)
#QPW	; Check power status
@OK ON	; Player is powered on and ready
#EJT	; Eject the tray
@OK OPEN	; Tray opens (Place a disc on the tray)
#PLA	; Start playback
@OK PLAY	; You may get "ER OVERTIME" message due to the mechanical delay. This is normal.
#QDT	; Check disc type
@OK LOADING	; Player is still loading (Wait for awhile)
#QDT	; Check disc type again
@OK BD-MV	; Disc is a Blu-ray disc
#QPL	; Check playback status
@OK PLAY	; Playback is in progress (Watch the movie)
#STP	; Stop playback
@OK STOP	; Playback has stopped
#EJT	; Eject the tray
@OK OPEN	; Tray opens (Take out the disc)
#POF	; Turn off power
@OK OFF	; The player turns off

lexicon